

**UNITED STATES DISTRICT COURT  
DISTRICT OF MASSACHUSETTS**

MASSACHUSETTS INSTITUTE OF  
TECHNOLOGY,

Plaintiff,

**V.**

HARMAN INTERNATIONAL INDUSTRIES,  
INCORPORATED,

Defendant.

Civil Action No. 05-10990-DPW  
Magistrate Judge Judith G. Dein

**ORAL ARGUMENT  
REQUESTED**

**HARMAN'S MOTION TO STRIKE THE SUPPLEMENTAL EXPERT REPORT OF  
RICHARD A. BELGARD**

On November 10, 2006, MIT served Harman with a “supplemental” expert report of Richard A. Belgard. Mr. Belgard’s new report is untimely, presents opinions based on information in documents available to MIT and its experts for several months prior to the expert report deadline (but which counsel for MIT chose not to reveal to Mr. Belgard until very recently), and addresses Harman products that Mr. Belgard consciously chose not to address in his original report, admittedly because he ran out of time to analyze those products. To be sure, the topics and information addressed in Mr. Belgard’s new report should have been addressed *four months* ago, pursuant to the Court’s Scheduling Order, as amended by stipulation of the parties, which established a July 18, 2006 deadline for “a *complete* statement of *all* opinions to be expressed and the basis and reasons therefore” under Fed. R. Civ. P. 26(a)(2)(B).

MIT is attempting to shift the burden to Harman to prove non-infringement by waiting for Harman's rebuttal expert report, and then correcting all of the mistakes and filling in all the gaps in Mr. Belgard's original report. Harman is unduly prejudiced by MIT's improper tactics.

which not only shift the burden of proof, but change the landscape for dispositive motions, divert resources, deny Harman a fair opportunity to rebut MIT's allegations, and increase costs and burden for Harman and its experts. Mr. Belgard's report should be stricken, and he should be precluded from testifying at trial or at summary judgment regarding any opinions or documents that could have (and should have) been addressed in his original report.

### **BRIEF STATEMENT OF FACTS**

Under this Court's order, amended by agreement of the parties, MIT's expert reports addressing the alleged infringement by Harman were due July 18, 2006. MIT timely served Mr. Belgard's original infringement report, which addressed only three Harman products (RB4, Crossfire, and TrafficPro) and only some of the asserted patent claims (most notably, not claim 45). Mr. Belgard's report did not contain any opinion or analysis with respect to any of the computer source code used by Harman's products, even though that source code was provided to MIT nearly a year ago, in February, 2006.<sup>1</sup> During his deposition, Mr. Belgard admitted that he was never even informed that MIT's counsel had access to the Harman source code, and that he was never asked to analyze the vast majority of Harman's source code. *See* Exhibit A, Belgard Dep. at 9:18-10:3.<sup>2</sup> Mr. Belgard also admitted that he never even bothered to look at any documents whatsoever regarding any other Harman products because he ran out of time and simply did not have time to do so. *See* Exhibit B, Belgard Dep. at 30:15-32:8.<sup>3</sup>

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<sup>1</sup> Indeed, MIT filed a premature motion to compel this source code, which was subsequently withdrawn. The fact that MIT pursued this source code so strongly at the outset of discovery reinforces the conclusion that there is no legitimate excuse for Mr. Belgard's failure to address the source code in his original report.

<sup>2</sup> The same is true with respect to all of MIT's infringement experts. None of them were ever told about Harman's source code, none were ever told that they could be provided access to it, and none were asked to analyze it. *See* Exhibit C, Grosz Dep. at 50:23-52:3; *see also* Exhibit D Cannon Dep. at 149:21-150:2

<sup>3</sup> Mr. Belgard also wasted time analyzing Harman's RB3 product, which is a Europe-only product that is never sold or used in the United States. Harman made this clear to MIT at the very beginning of the case, but counsel

On July 13, 2006, counsel for MIT identified certain documents for which they requested Harman make targeted, supplemental searches. In light of this very small set of newly discovered documents (as well as additional documents that MIT produced after this Court concluded that MIT had improperly withheld them on baseless claims of privilege), the parties' agreed (and the Court ordered) that supplemental reports *limited in scope to "new evidence"* could be served on or before November 10, 2006. See Exhibit E, Docket Entry 109, Docket Entry 109, Joint Motion For Withdrawal of MIT's Motion To Compel, For Supplementation of Expert Reports And For Extension Of Schedule, at page 3.

On November 10, 2006, MIT served a 96 page "supplemental" report authored by Mr. Belgard.<sup>4</sup> This "supplemental" report violates the parties' agreement and this Court's order, because it is not limited to new evidence, but instead presents Mr. Belgard's belated analysis of hundreds of pages of documents and source code available to MIT and Mr. Belgard for weeks or months prior to the deadline for his original infringement report. See Exhibit F, Table of Belgard Reliance Documents Previously Produced. Mr. Belgard's new report also addresses claim 45 of the patent-at-issue, which was not a part of his original report. Tellingly, *all* of the documents relied on in Mr. Belgard's new report with respect to claim 45 were produced to MIT *prior to* his original report. Mr. Belgard's new report also addresses at least five new Harman products (W211 (including midline, highline, 6059 and 7042 models), DVD Navimodule for Audi (including A6 and A8 models), PCM 2, PCM 2.1, and NTG4 (RER and REU models)), none of which was analyzed by Mr. Belgard in any way whatsoever in his original report because he ran

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for MIT apparently never bothered to tell Mr. Belgard this until after he spent significant time analyzing that product.

<sup>4</sup> Harman notes that Mr. Belgard's new "supplemental" report is 25 pages longer than Mr. Belgard's original report.

out of time and chose not to address them. *See* Exhibit B. MIT and Mr. Belgard completely disregarded the parties' agreement and this Court's Order and blatantly introduced completely new opinions and analyses based on documents and information that MIT's counsel already had, but which they inexplicably failed to provide to Mr. Belgard prior to his original report.

**1. This Court's Order Limits Supplemental Reports To Newly Produced Evidence.**

Expert "disclosures shall be made at the times and in the sequence directed by the Court." Fed. R. Civ. P. 26(a)(C). This Court directed such a sequence for this matter, requiring full disclosure of "all opinions" and bases for those opinions from responsive experts by July 14, 2006. *See* Exhibit G, Docket Entry 83, Scheduling Order and Order On Parties' Motions To Compel Discovery dated June 15, 2006. By stipulation of the parties, this deadline was extended to July 18, 2006.

Due to the limited production after the initial expert reports were issued, the parties met and conferred and agreed that supplemental reports could be prepared and issued, but that the expert opinions must be limited to opinions based on "new evidence" produced in August or September, 2006. *See* Exhibit E, Docket Entry 109, Joint Motion For Withdrawal of MIT's Motion To Compel, For Supplementation of Expert Reports And For Extension Of Schedule.

**2. Mr. Belgard's Supplemental Report Presents New Opinions And Analyses Based Upon Old Evidence In Violation Of This Court's Order.**

Rule 26(a)(2)(B) requires that an expert report "contain a *complete* statement of *all* opinions to be expressed and the basis and reasons therefore." Fed. R. Civ. P. 26 (a)(2)(B) (emphasis added); *see also* Fed. R. Civ. P. 26 advisory committee notes (experts "must prepare a detailed and complete written report"). Here, MIT's "supplemental report" *for the first time* presents an analysis of Harman's source code and of additional products as well as claim 45. Mr. Belgard, could have – and should have – conducted these analyses in "the sequence directed

by the court.” MIT’s report is a second bite at the apple, attempting to submit new opinions and bases that support its non-infringement and damages allegations. Such “sandbagging” is not permitted under the Federal Rules. *See* Fed. R. Civ. P. 37(c)(1) (A party “that without substantial justification fails to disclose information required by Rule 26(a) shall not, unless such failure is harmless, be permitted to use as evidence at a trial any information not so disclosed.”); *see also* Exhibit J, *O2 Micro Int’l. Ltd. v. Monolithic Power Sys., Inc.*, No. 06-1064, 2006 WL 3300458, at \*10-11 (Fed. Cir. November 15, 2006) (affirming the exclusion of supplemental expert opinions in violation of applicable scheduling order under Rule 37(c)(1) as “an appropriate sanction for the failure to comply with such deadlines”); *see also Keemer v. United States*, 181 F.R.D. 639, 640-1 (D. Mon. 1998) (precluding expert’s testimony on opinions expressed in untimely “supplemental” report because it contained information and opinions required to be contained in initial disclosure).

The parties’ agreement to allow supplementation based on “new evidence” does not open the door to new opinions based upon old evidence that Mr. Belgard neither reviewed nor included in his original report, either because he ran out of time, could not conclude that there was infringement or perhaps for which he concluded that there was no infringement. *Salgado v. General Motors Corp.*, 150 F.3d 735, 742, n. 6 (7<sup>th</sup> Cir. 1998) (“If the expert’s report contains only incomplete opinions, the court may choose to restrict the expert’s testimony to those opinions alone.”). Yet, this is exactly what Mr. Belgard’s newly issued report attempts to do.

**a. Mr. Belgard’s New Report Improperly and Prejudicially Addresses Harman’s Source Code In Violation of This Court’s Scheduling Order.**

The Harman computer source code that Mr. Belgard extensively relies on in his new report is not “new evidence.” All of this source code was made available to MIT as early as February 1, 2006, after MIT filed a premature motion to compel, which Harman responded to by

producing the source code under mutually-agreed confidentiality conditions. This source code remained available to MIT throughout fact discovery. MIT's counsel never bothered to show the source code to Mr. Belgard, or even inform him that it was available for analysis. *See* Exhibit A, Belgard Dep. at 9:18-10:3. The source code is not new evidence but instead was available to MIT for months preceding the close of fact discovery. Despite its availability, and despite MIT's having moved for such production, MIT did not review the source code, *or even inquire about doing so* during this time period. *See* Exhibit H, Gunderson August 30, 2006 letter to Baron.

Only after Harman's expert, Robert French, relied on Harman's source code to point out the significant flaws in the assumptions Mr. Belgard made in his original report did MIT decide to show Mr. Belgard the source code. Mr. French's rebuttal report established that MIT's experts wholly failed to set forth even a *prima facie* case of infringement for *any* Harman product. Facing the prospect of certain summary judgment of non-infringement for most, if not all, of Harman's products, MIT had no choice but to ignore the parties' agreement and this Court's Order and have Mr. Belgard undertake the type of analysis that he should have done prior to July 18, 2006, in his original report. MIT's strategy is simply an improper attempt to force Harman to prove non-infringement and Harman has consistently objected to any attempt by MIT to supplement its experts' reports based upon its belated consideration of the code. *See* Exhibit H, at p. 1 (noting that "Harman objects to any attempt by MIT or its experts to supplement their expert reports at this late date based on information that was available (or should have been requested, but was not) during the period for fact discovery").

**b. Mr. Belgard's New Report Addresses New Products For The First Time.**

Mr. Belgard's original infringement analysis and report addressed *only three* Harman products (RB4, Crossfire, and TrafficPro). Mr. Belgard's new report presents his belated analysis of *at least five* new products (W211 (including midline, highline, 6059 and 7042

models), DVD Navimodule for Audi (including A6 and A8 models), PCM 2, PCM 2.1, and NTG4 (including RER and REU models)) that he completely ignored in his original report. It is clear from Mr. Belgard's deposition testimony that he was not asked to analyze these additional products, and in fact, could not have conducted any additional analyses in the time that he had available. Exhibit C, Belgard Dep. at 30:15-32:8. Furthermore, Mr. Belgard's "supplemental" analysis of these previously-ignored products *relies on more than 100 documents* that Harman *produced between January and June* of 2006, months before Mr. Belgard's original report was served. There is no excuse for Mr. Belgard's failure to address these documents in his original report.<sup>5</sup> MIT knew the identity of all of Harman's U.S. navigation products long before the original due date for expert reports. *See* Exhibit I, Harman's Supplemental Responses To MIT'S First Set Of Interrogatories (Nos. 1-11), Response to Interrogatory No. 1 served on June 16, 2006. In fact, MIT noticed and took a 30(b)(6) deposition that covered the structure and operation of *all* of Harman's products.

MIT never complained that it needed more time or any additional 30(b)(6) testimony about Harman's products. To the extent MIT failed to inquire about *all* of Harman's products during that deposition or failed to obtain an understanding of Harman's documents and products (including the previously-produced source code, which MIT never even discussed during the 30(b)(6) deposition), that is not an excuse to supplement its expert infringement reports.

**c. Mr. Belgard's New Report Improperly Includes An Analysis Of Claim 45 For The First Time In Violation Of This Court's Scheduling Order.**

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<sup>5</sup> In fact, even the "newly produced documents" relied upon in Mr. Belgard's new report are cited for information that is largely cumulative of information in Harman's prior productions. For example, Mr. Belgard cites, at page 4 to HAR 279830 (produced August 1, 2006) for information regarding the machine man interface. A more current version of this same document was produced on March 28, 2006. The specific cited pages in that section (HAR 279842-859) are largely identical to HAR 181367-383 in the revision produced on March 28, 2006. The parties conferred regarding these documents and MIT was aware of their cumulative nature. However, to the extent that the Court believes that certain material is new and not cumulative, Mr. Belgard's opinions should be limited to such new material.

Mr. Belgard's new report also adds new opinions with respect to claim 45 of MIT's patent – with respect to *all* of the products he analyzed – including those that he already addressed in his original report. MIT has never complained that it did not have sufficient information about Harman's RB4, Crossfire, or TrafficPro devices from which Mr. Belgard could analyze claim 45. Indeed, MIT's other experts did address claim 45 in their reports, establishing that MIT did, in fact, have the documents necessary to analyze claim 45 for those products.

Most tellingly, *all* of the documents, testimony and source code that Mr. Belgard relies on with respect to claim 45 *were produced to MIT prior to Mr. Belgard's original report*. There is simply no basis for Mr. Belgard to add new opinions with respect to claim 45. His opinions in no way relate to any newly produced information.

Nonetheless, Mr. Belgard, now claims in his new report at ¶ 258 that “my initial Expert Report inadvertently omitted my analysis of claim 45...” and then proceeds, without any allowance under this Court's order, to offer evidence regarding the infringement of claim 45 as against the products analyzed in his original report. He further claims at ¶260 that “[m]y opinion today regarding infringement of claim 45 ... has not changed from my initial Expert Report...” a claim which is demonstrably incorrect, as his original report did not address claim 45 at all. Supplemental expert reports should not be used to circumvent discovery deadlines and correct deficiencies caused by omissions and or lack of diligence in the original report. *See O2 Micro*, 2006 WL 3300458, at \*10-11 (affirming the exclusion of supplemental expert opinions in violation of applicable scheduling order “given the significance of the omitted material and [plaintiff's] lack of diligence.”) This Court should strike MIT's attempt to correct omissions in Mr. Belgard's report through improper supplementation.



**3. Mr. Belgard Improperly Presents New Analyses in Rebuttal To “Old” Evidence Addressed in Harman’s Expert Rebuttal Report**

Mr. Belgard’s new report also includes new opinions and new infringement arguments in reply to the rebuttal expert report of Harman’s non-infringement expert, Robert French. In doing so, Mr. Belgard does not rely on any “newly produced information.” Instead, Mr. Belgard is improperly filling in the gaps in his earlier analysis by relying on information that has been available to MIT all along. Importantly, Mr. Belgard even adds, beginning at ¶ 234 of his new report, completely new analyses under the doctrine of equivalents, stating that “[a]ssuming, however, Mr. French’s conclusions and reasoning are correct that the RB4, TrafficPro II, and the Crossfire Radio do not literally practice claim 1 of the ‘685 patent, it is my opinion that each of the RB4, the TrafficPro II and the Crossfire Radio practice claim 1 of the ‘685 patent under the doctrine of equivalents. I explain my rationale on an element-by-element basis below.”

This scenario was not contemplated by this Court’s scheduling order. Harman, which has abided by the Court’s order, has had no such opportunity for its experts to file a “sur-reply” opinion addressing Harman’s case-in-chief on invalidity and unenforceability. Such an unfair advantage for MIT is unquestionably prejudicial and warrants the Court’s exclusion of the report. *See Salgado*, 150 F.3d at 742 (affirming exclusion of expert’s testimony because his report was untimely and “deficient in substance.”); *see also Hill v. Porter Memorial Hospital*, 90 F.3d 220, 224 (7<sup>th</sup> Cir. 1996) (affirming preclusion of untimely disclosed experts because “adherence to established deadlines is essential if all parties are to have a fair opportunity to present their positions”; *see also O2 Micro*, 2006 WL 3300458 at \*10-11 (affirming the exclusion of supplemental expert opinions seeking to offer new bases for infringement allegations in violation of applicable scheduling order).

**4. Mr. Belgard’s New Report Is Unduly Prejudicial To Harman**

Harman is undoubtedly prejudiced by MIT's improper attempt to bolster Mr. Belgard's initial infringement opinions, which were to be *complete* as of July 18, 2006. Harman, and its experts, have expended significant effort and resources in analyzing Mr. Belgard's initial opinions, taking Mr. Belgard's deposition, and issuing responsive opinions. MIT was on notice of the likelihood that Harman would file a dispositive motion as to infringement as early as June 16, 2006 when Harman issued its supplemental interrogatory responses as to infringement which included detailed non-infringement charts responding to MIT's allegations to date. *See* Exhibit I, Harman's Supplemental Responses To MIT'S First Set Of Interrogatories (Nos. 1-11) served on June 16, 2006. Allowing Mr. Belgard's new report to stand would significantly change the current landscape for dispositive motions, as his newly formed opinions (based on the same evidence available to him previously) differ significantly from his original opinions, add products and claims to his analysis, and incorporate information gleaned from Mr. French's rebuttal report. Such an advantage, drastically changing the scope of MIT's infringement allegations and bolstering deficiencies as identified by Harman's rebuttal expert, is highly prejudicial.

Furthermore, responding to MIT's and Mr. Belgard's new contentions would force Harman to expend significant additional resources and deny Harman a fair opportunity to depose Mr. Belgard regarding his opinions and to rebut MIT's allegations. These resources should be directed toward Harman's dispositive motions, which are due in less than one month under this Court's current scheduling order.

Mr. Belgard's report should be stricken, and he should be precluded from testifying at trial or at summary judgment regarding any opinions or documents that could have (and should have) been addressed in his original report.

**CONCLUSION**

For the foregoing reasons, Harman respectfully requests that the Court strike the November 10, 2006 Supplemental Expert Report of Richard A. Belgard in its entirety.

**COMPLIANCE WITH LOCAL RULES 7.1 AND 37.1**

Harman's counsel discussed the issues raised herein with MIT's counsel on November 22, 2006. During that conference call, the parties agreed that an impasse had been reached as to this issue. As the parties have been unable to resolve the issue, Harman is forced to respectfully request the Court's assistance.

**REQUEST FOR ORAL ARGUMENT**

Furthermore, pursuant to Local Rule 7.1, Harman respectfully requests an oral argument in conjunction with Harman's Motion To Strike The Supplemental Expert Report Of Richard Belgard.

Dated: November 28, 2006

Respectfully submitted,

/s/ Courtney A. Clark

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**CERTIFICATE OF SERVICE**

I hereby certify that a copy of the foregoing **HARMAN'S MOTION TO STRIKE THE SUPPLEMENTAL EXPERT REPORT OF RICHARD A. BELGARD** was delivered by electronic means this 28th day of November, 2006, to counsel for MIT as follows:

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/s/ Courtney A. Clark

# **EXHIBIT A**

RICHARD BELGARD, SEPTEMBER 6, 2006

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18 Q At the time you signed your report on  
19 July 17th of 2006, were you aware at that time that  
09:12:02 20 Harman had made available a DVD of its source code to  
21 MIT?  
22 A I am not aware of it as I sit here today  
23 that they made a DVD available. I know that there  
24 was source code that I reviewed, but that's the first  
09:12:21 25 time I've ever heard there was a DVD made available.

RICHARD BELGARD, SEPTEMBER 6, 2006

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1 Q Counsel for MIT never told you that such a

2 DVD was made available?

3 A No.



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# **EXHIBIT B**

RICHARD BELGARD, SEPTEMBER 6, 2006

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09:45:41 15 Q What about any other accused devices; were  
16 you asked to analyze any of the imported products,  
17 the Mercedes or Audi products, for example?

18 A I don't think so. And, at some point, I  
19 think I said, "Look, you know, I can either give you  
09:46:17 20 an analysis of what I can give you an analysis of, or  
21 you can delay my expert report, but I can't do any  
22 more."

23 Q Because -- why couldn't you do any more?  
24 You were running out of time?

09:46:29 25 A I only had as much time as I had documents.

RICHARD BELGARD, SEPTEMBER 6, 2006

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1 You know, I continuously asked for more documents  
2 on -- just beyond my belief that these are the  
3 documents -- that these are the best documents that  
4 there are.

09:46:44

5 Q Did you ask for more documents about any  
6 other products, or were your requests for more  
7 documents limited to the three products you analyzed?

8 A I don't remember. I don't remember.

09:46:59

9 Q Were you ever asked to analyze any of the  
10 imported products like the Mercedes and Audi, or were  
11 those systems that you did no effort to analyze at  
12 all?

09:47:15

13 A So that sort of was compound. Let me  
14 answer both questions. Never -- I'll answer the last  
15 one.

16 I never did any analysis of those, and I  
17 may or may not have been asked to.

09:47:29

18 Q Did you ever make a conscious effort to  
19 look for documents in the database that was made  
20 available to you that related to any products other  
21 than RB4, TrafficPro II, or Crossfire?

22 A RB3.

09:47:46

23 Q Other than RB3, RB4, TrafficPro, and  
24 Crossfire, did you ever make any effort to look in  
25 the database for documents relating to any other

RICHARD BELGARD, SEPTEMBER 6, 2006

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1 products?

2 A No.

3 Q Were you ever told, "Don't bother to look  
4 for any such documents, for any other products beyond  
09:48:22 5 RB3, RB4, TrafficPro II, or Crossfire"?

6 A I actually believe that I was kind of  
7 encouraged to find -- to start working on other  
8 products, and I just said, "I'm out of time."

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# **EXHIBIT C**

BARBARA J. GROSZ, PH.D., AUGUST 30, 2006

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23 Q. Did you ever talk to anyone -- any of MIT's  
24 attorneys about the fact that you didn't have

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BARBARA J. GROSZ, PH.D., AUGUST 30, 2006

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1 enough information to reach a conclusion about  
2 Claim 41?

3 A. I believe that I did say that, and that's why  
4 it's not mentioned in my report.

5 Q. Who did you say that to?

6 A. Either Mr. Baron or Mr. Pint.

7 Q. Did you tell Mr. Baron and Mr. Pint that you  
8 needed to see Harman's software code in order to  
9 determine whether or not there was infringement  
10 of Claim 41?

11 A. I don't believe I used those exact words, but I  
12 probably conveyed the idea that you can't tell  
13 whether it's object-oriented programming without  
14 knowing -- seeing the software or seeing some  
15 kind of detail specification for the software.

16 Q. When you said that to them, did they tell you  
17 that they had access to the Harman source code  
18 and that you could have looked at it if you  
19 wanted to?

20 A. No.

21 Q. Did you know -- do you know as you sit here  
22 today whether or not they did have access to the  
23 Harman source code?

24 A. No.

BARBARA J. GROSZ, PH.D., AUGUST 30, 2006

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1 Q. So if I told you they did, that would be the  
2 first you've heard of it?

3 A. Yes.



# **EXHIBIT D**

DR. M. ELIZABETH CANNON, 30(b)(6), SEPTEMBER 12, 2006

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21 Q. And your assumption is that they are  
22 functionally the same; although, the actual  
23 underlying software might be different? Is  
24 that correct?

DR. M. ELIZABETH CANNON, 30(b)(6), SEPTEMBER 12, 2006

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<sup>1</sup> A. I cannot comment on the software,  
<sup>2</sup> because I have not seen it.

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# **EXHIBIT E**



## **II. Motion for Limited Supplementation of Expert Reports**

The parties have reached an agreement concerning Harman's identification of previously produced documents and production of limited additional documents, as requested by MIT as part of its Motion to Compel. The parties' agreement is memorialized in correspondence between counsel, which is incorporated into this Motion and any resulting Order by reference. *See* September 21 and 22 J. Edwards Letters to J. Baron, attached as Ex. A. Pursuant to their agreement, Harman has identified in its production certain documents which MIT sought in its Motion to Compel, but had trouble locating. Harman will also produce additional documents, which have been specially prepared at MIT's request (without waiving any privileges or objections), which show the software versions used to create the Navigation CD's for each Accused Product. Harman will also search for additional versions of Harman specification documents, referred to as "ME\_NAV", "MU\_DST," "MU\_POI" and "ME\_WID" in HAR279688, as well as sufficient, non-privileged, existing documentation to show which versions of these specifications were used in production of the Accused Products. Harman will provide a working sample of the Mercedes W211 product, and MIT will pay Harman for that product in advance by tendering to Harman a deposit in the form of an attorney's check or certified funds for \$5,000. Harman will order the production of the sample on an expedited basis. Typically, production of a sample takes approximately 6-8 weeks. After the sample order is complete or Harman is able to ascertain the final cost for the sample, whichever comes first, Harman will refund to MIT any excess remaining from MIT's deposit. Furthermore, Harman will, at its option, either produce the specific versions of the source code for various modules at MIT's request, or shall agree and stipulate that a version which has been produced is representative of all versions for purposes of an infringement analysis.

Harman has agreed that MIT may supplement its expert reports based on any new evidence first produced by Harman in August or September 2006. The parties have also agreed that Harman may supplement its rebuttal expert reports to address any or all of MIT's supplementation. To facilitate this, the parties have agreed that MIT will file its supplemental expert reports, as agreed in the proposed schedule set forth in Section III below. Afterward, Harman will file its supplemental rebuttal expert reports, as agreed in the proposed schedule. The parties shall reserve any objections to the original or supplemental expert reports until the time allowed for Motions in Limine or *Daubert* Motions, as appropriate. The parties also reserve the right to conduct additional expert depositions, to the extent reasonably required as a result of the supplementation. Any additional expert depositions will be strictly limited in scope to the supplementation. The parties will file any appropriate motions based upon their objections during the time allowed for *Daubert* Motions or Motions in Limine, as applicable.

### **III. Joint Proposed Schedule**

Pursuant to the parties' Agreement, as reflected above, the parties have also agreed to a revised proposed schedule as set forth below. The parties respectfully request this Court amend its current Scheduling Order to reflect this mutually agreed proposed schedule, which follows.

<b>ACTIVITY</b>	<b>CURRENT DEADLINE</b>	<b>PROPOSED DEADLINE</b>
<b>CLOSE OF FACT DISCOVERY</b>	June 16, 2006	September 27, 2006
<b>SUPPLEMENTAL EXPERT REPORTS</b>	NONE	October 20, 2006
<b>SUPPLEMENTAL EXPERT REBUTTAL REPORTS</b>	NONE	November 3, 2006
<b>CLOSE OF EXPERT DISCOVERY</b>	September 15, 2006	November 3, 2006
<b>DISPOSITIVE MOTIONS</b>	September 29, 2006	November 3, 2006

<b>&amp; DAUBERT MOTIONS</b>		
<b>OPPOSITIONS TO DISPOSITIVE &amp; DAUBERT MOTIONS</b>	October 13, 2006	December 1, 2006



Dated: September 27, 2006

Massachusetts Institute of Technology,

*By its attorneys,*

/s/ Steven M. Bauer

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Respectfully submitted,

Harman International Industries, Inc.,

*By its attorneys,*

/s/ Courtney A. Clark

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# **EXHIBIT F**

**Exhibit F**  
**Belgard Reliance Documents Previously Produced**

<b>Bates Begin</b>	<b>Bates End</b>	<b>Date Produced</b>
HAR 043782	HAR 043899	1/18/2006
HAR 043903	HAR 043938	1/18/2006
HAR 046515	HAR 046529	1/18/2006
HAR 047400	HAR 047443	1/18/2006
HAR 049736	HAR 049739	1/18/2006
HAR 050036	HAR 050037	1/18/2006
HAR 050961	HAR 050993	1/18/2006
HAR 060920	HAR 060957	1/26/2006
HAR 060958	HAR 061048	1/26/2006
HAR 061049	HAR 061144	1/26/2006
HAR 061145	HAR 061245	1/26/2006
HAR 061246	HAR 061351	1/26/2006
HAR 061352	HAR 061477	1/26/2006
HAR 061478	HAR 061607	1/26/2006
HAR 061608	HAR 061738	1/26/2006
HAR 061870	HAR 062011	1/26/2006
HAR 062012	HAR 062155	1/26/2006
HAR 062156	HAR 062300	1/26/2006
HAR 062446	HAR 062592	1/26/2006
HAR 062593	HAR 062743	1/26/2006
HAR 062744	HAR 062895	1/26/2006
HAR 076690	HAR 076690	1/30/2006
HAR 076691	HAR 076705	1/30/2006
HAR 076801	HAR 076801	1/30/2006
HAR 076802	HAR 076811	1/30/2006
HAR 076812	HAR 076837	1/30/2006
HAR 078380	HAR 078380	1/30/2006
HSC 000245	HSC 000274	2/2006

Bates Begin	Bates End	Date Produced
HSC 000712	HSC 000726	2/2006
HSC 000727	HSC 000728	2/2006
HSC 000731	HSC 000738	2/2006
HSC 000752	HSC 000811	2/2006
HSC 000855	HSC 000876	2/2006
HSC 000878	HSC 000902	2/2006
HSC 000903	HSC 000905	2/2006
HSC 000933	HSC 000953	2/2006
HSC 000954	HSC 000956	2/2006
HSC 000957	HSC 000963	2/2006
HSC 001047	HSC 001091	2/2006
HSC 001092	HSC 001093	2/2006
HSC 001271	HSC 001282	2/2006
HSC 001283	HSC 001312	2/2006
HSC 001313	HSC 001330	2/2006
HSC 001422	HSC 001448	2/2006
HSC 001599	HSC 001616	2/2006
HSC 001833	HSC 001876	2/2006
HSC 001877	HSC 001985	2/2006
HSC 001986	HSC 001988	2/2006
HSC 002229	HSC 002230	2/2006
HSC 002312	HSC 002323	2/2006
HSC 002324	HSC 002326	2/2006
HSC 002327	HSC 002479	2/2006
HSC 002480	HSC 002486	2/2006
HSC 003133	HSC 003192	2/2006
HSC 006510	HSC 006541	2/2006
HSC 006542	HSC 006542	2/2006
HSC 009789	HSC 009861	2/2006
HSC 009864	HSC 009869	2/2006

Bates Begin	Bates End	Date Produced
HSC 009870	HSC 009870	2/2006
HSC 009872	HSC 009880	2/2006
HSC 009881	HSC 009890	2/2006
HSC 009908	HSC 009954	2/2006
HSC 009957	HSC 010000	2/2006
HSC 010001	HSC 010061	2/2006
HSC 010282	HSC 010286	2/2006
HSC 010287	HSC 010288	2/2006
HSC 010474	HSC 010497	2/2006
HSC 010498	HSC 010503	2/2006
HSC 010514	HSC 010530	2/2006
HSC 010531	HSC 010538	2/2006
HSC 010539	HSC 010560	2/2006
HSC 010561	HSC 010563	2/2006
HSC 010653	HSC 010681	2/2006
HSC 010682	HSC 010695	2/2006
HSC 010894	HSC 010931	2/2006
HSC 010932	HSC 010932	2/2006
HSC 010951	HSC 011006	2/2006
HSC 011007	HSC 011036	2/2006
HSC 011098	HSC 011107	2/2006
HSC 011141	HSC 011147	2/2006
HSC 011649	HSC 011688	2/2006
HSC 011689	HSC 011708	2/2006
HSC 011810	HSC 011815	2/2006
HSC 012822	HSC 012830	2/2006
HSC 013861	HSC 013902	2/2006
HSC 013936	HSC 013980	2/2006
HSC 013981	HSC 014027	2/2006
HSC 017686	HSC 017686	2/2006

Bates Begin	Bates End	Date Produced
HAR 091354	HAR 091565	3/22/2006
HAR 091566	HAR 091566	3/22/2006
HAR 092271	HAR 092454	3/22/2006
HAR 092455	HAR 092455	3/22/2006
HAR 092660	HAR 092664	3/22/2006
HAR 092665	HAR 092672	3/22/2006
HAR 092673	HAR 092680	3/22/2006
HAR 092681	HAR 092696	3/22/2006
HAR 092697	HAR 092704	3/22/2006
HAR 092705	HAR 093124	3/22/2006
HAR 093125	HAR 093129	3/22/2006
HAR 103073	HAR 103087	3/28/2006
HAR 113778	HAR 113810	3/28/2006
HAR 113811	HAR 113816	3/28/2006
HAR 113817	HAR 113848	3/28/2006
HAR 113850	HAR 113876	3/28/2006
HAR 113914	HAR 113968	3/28/2006
HAR 113969	HAR 114000	3/28/2006
HAR 114001	HAR 114024	3/28/2006
HAR 114044	HAR 114066	3/28/2006
HAR 114172	HAR 114195	3/28/2006
HAR 121174	HAR 121187	3/28/2006
HAR 168541	HAR 168543	3/28/2006
HAR 169107	HAR 169121	3/28/2006
HAR 177278	HAR 177325	3/28/2006
HAR 177418	HAR 177515	3/28/2006
HAR 177913	HAR 177918	3/28/2006
HAR 178908	HAR 178908	3/28/2006
HAR 178961	HAR 179099	3/28/2006
HAR 180240	HAR 180400	3/28/2006

Bates Begin	Bates End	Date Produced
HAR 180401	HAR 180443	3/28/2006
HAR 180444	HAR 180474	3/28/2006
HAR 181353	HAR 181543	3/28/2006
HAR 181752	HAR 181758	3/28/2006
HAR 187994	HAR 188019	3/28/2006
HAR 188186	HAR 188219	3/28/2006
HAR 188708	HAR 188708	3/28/2006
HAR 211246	HAR 211256	4/20/2006
HAR 211257	HAR 211262	4/20/2006
HAR 211360	HAR 211443	4/20/2006
HAR 212317	HAR 212323	4/20/2006
HAR 212907	HAR 212956	4/20/2006
HAR 213621	HAR 213670	4/20/2006
HAR 214476	HAR 214503	4/20/2006
HAR 215708	HAR 215843	4/20/2006
HAR 215850	HAR 215882	4/20/2006
HAR 215919	HAR 215954	4/20/2006
HAR 215955	HAR 216076	4/20/2006
HAR 216504	HAR 216523	4/20/2006
HAR 311850	HAR 311851	4/21/2006
HAR 317740	HAR 317744	4/21/2006
HAR 322037	HAR 322037	4/21/2006
HAR 343646	HAR 343665	4/21/2006
HAR 343739	HAR 343763	4/21/2006
HAR 358238	HAR 358262	4/21/2006
HAR 362258	HAR 362260	4/21/2006
HAR 367221	HAR 367224	4/21/2006
HAR 367345	HAR 367352	4/21/2006
HAR 367772	HAR 367790	4/21/2006
HAR 367796	HAR 367824	4/21/2006

Bates Begin	Bates End	Date Produced
HAR 369033	HAR 369051	4/21/2006
HAR 369657	HAR 369677	4/21/2006
HAR 379608	HAR 379728	4/21/2006
HAR 380378	HAR 380392	4/21/2006
HAR 592829	HAR 592864	4/21/2006
HAR 666505	HAR 666602	4/21/2006
HANIKA 0048195	HANIKA 0048195	between 04/2006-06/2006
JESKE 0002856	JESKE 0002856	between 04/2006-06/2006
JESKE 0002884	JESKE 0002884	between 04/2006-06/2006
WELLMANN 0000318	WELLMANN 0000318	between 04/2006-06/2006
WELLMANN 0000328	WELLMANN 0000328	between 04/2006-06/2006
WELLMANN 0000509	WELLMANN 0000509	between 04/2006-06/2006
WELLMANN 0000705	WELLMANN 0000705	between 04/2006-06/2006
WELLMANN 0001454	WELLMANN 0001454	between 04/2006-06/2006
WELLMANN 0001992	WELLMANN 0001992	between 04/2006-06/2006



# **EXHIBIT G**

UNITED STATES DISTRICT COURT  
DISTRICT OF MASSACHUSETTS

MASSACHUSETTS INSTITUTE	)	
OF TECHNOLOGY,	)	
	)	
Plaintiff,	)	CIVIL ACTION
v.	)	NO. 05-10990-DPW
	)	
HARMAN INTERNATIONAL	)	
INDUSTRIES, INC.,	)	
	)	
Defendant.	)	

**SCHEDULING ORDER AND ORDER  
ON PARTIES' MOTIONS TO COMPEL DISCOVERY**

On June 15, 2006, this court held a hearing to consider "Harman's Motion to Compel MIT's Responses to Harman's Interrogatories Nos. 9, 10 and 16 and Compliance with Harman's Rule 30(b)(6) Deposition Notice" (Docket No. 73) and "MIT's Counter-Motion to Compel Discovery" (Docket No. 78). At the hearing, the parties informed the court that they had resolved the issues raised by Harman's motion and MIT's counter-motion. However, Harman requested that the schedule for expert discovery and the filing of motions for summary judgment be extended by approximately one month. After consideration of the parties' positions, this court hereby ORDERS as follows:

1. Harman's motion to compel responses to interrogatories and compliance with Harman's Rule 30(b)(6) deposition notice (Docket No. 73) is withdrawn by agreement of the parties.

2. MIT's counter-motion to compel discovery (Docket No. 78) is withdrawn by agreement of the parties.

3. The parties shall comply with the following schedule:

- (a) The parties shall disclose their expert witnesses, pursuant to Fed. R. Civ. P. 26(a)(2), by **July 14, 2006**.
- (b) The parties shall serve any expert rebuttal reports by **August 11, 2006**.
- (c) All expert discovery shall be completed by **September 8, 2006**.
- (d) The parties shall file any motions for summary judgment by **September 22, 2006**.
- (e) Any oppositions to motions for summary judgment shall be filed by **October 13, 2006**.

/ s / Judith Gail Dein  
Judith Gail Dein  
United States Magistrate Judge

DATED: June 15, 2006

# **EXHIBIT H**

**KIRKLAND & ELLIS LLP**

AND AFFILIATED PARTNERSHIPS

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August 30, 2006

**VIA ELECTRONIC MAIL**

Jacob K. Baron  
Proskauer Rose LLP  
One International Place  
Boston, MA 02110-2600

Re: *MIT v. Harman Int'l Indus., Inc.*—Case No. 05-10990 DPW (D. Mass)

Dear Jake,

I write in response to your letter of August 25, 2006 to Craig Leavell. As a threshold issue, we note that Harman made its full source code available to MIT several months ago, under conditions that MIT agreed to after extensive negotiations and even a premature motion to compel, which MIT ultimately withdrew in light of the parties' agreement. Despite the fact that the source code was readily available and located just a block or two from your offices, neither MIT's attorneys nor its experts ever took the time to review that source code. After a similar negotiation and premature motion, Harman also made available product samples of each of the then-accused systems, only to have MIT decline to accept all but one such sample. In addition, despite requests for payment, MIT has yet to pay for the one sample that Harman did provide, and despite MIT's express agreement to pay for the sample as a precondition for Harman's effort to provide them. Now, more than two months after the close of fact discovery, and only after the completion of expert reports, have you requested access to the source code and samples of devices that were accused of infringement on the final day of fact discovery. Your requests for these materials at this late date violates the Court's scheduling order and the Federal Rules. Thus, Harman objects to any attempt by MIT or its experts to supplement their expert reports at this late date based on information that was available (or should have been requested, but was not) during the period for fact discovery. It is clear to us that MIT is trying to shift the burden to Harman to prove non-infringement, which is inappropriate.

Regarding your item no. 1, these gaps were not intentional and the missing items were to be produced in our production of August 1, 2006. I am unsure why you did not receive them, regardless, I have attached another copy of these documents.

Regarding item nos. 2-4, 6, and 7 in general, we will communicate your specific requests for documents to our personnel in Germany to see whether any such documents can be located,

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and if so, we will consider whether they are responsive to any outstanding document requests. If so, we will produce them as soon as possible.

Regarding the documents sought in your item numbers 2 and 3, we have already repeatedly inquired as to whether such document exist, and have repeatedly been told that they do not exist. Nonetheless, we will inquire as to the previous personnel we asked and also ask others whether the requested documents exist. Harman has gone above and beyond its requirements to make a good faith effort for these documents.

Regarding the documents sought in your item number 4, we do not believe that such documents exist, but will make another effort to look for such documents. It is our understanding that there is no documentation which directly corresponds to the changes made in each version of the software module. We note that the source code did include a history of changes to each file, from which the information sought could have been determined, at least in part, based on the timing of the product releases.

Regarding the documents sought in your item number 5, we disagree with your assertion that later versions of software may have been backward-compatible necessarily means that the various versions can be applied to all systems. As new features were added, it does not follow that earlier systems included such features even if the software was compatible. Regarding your statement about Mr. Jeske's knowledge, the 30(b)(6) deposition notice did not seek that particular information. Had MIT provided anything more than a very broad request, we would have been in a position to ensure that Mr. Jeske was prepared to respond to any particular topic that was noticed. MIT assumed that it could simply apply findings about one system to each and every Harman system. The individuals who MIT consciously chose not to depose, such as Mr. Hanika-Heidl, for example, have additional, particular information about Harman's software. Harman strongly suggested that MIT depose several of the Germany-based witnesses, who had been disclosed very early on in this case as having relevant knowledge. MIT declined to do so, even though MIT had not used all 10 of the depositions under the presumptive limit of the Federal Rules. We specifically informed MIT that these witnesses had additional knowledge, but MIT declined to depose them. MIT did not timely serve any interrogatory seeking this information, nor has MIT ever contended that Harman was required to produce anyone other than Mr. Jeske for any follow-up to the 30(b)(6) deposition.

Regarding your item number 6, this is the first time that MIT has specifically requested that we attempt to locate this information. If it exists and can be located, we will produce it as soon as possible.

Regarding your item no. 8, any notes will be brought to Mr. French's deposition. However, Harman would like to point out that both Mr. Molzen and Mr. Hanika-Heidl were previously identified by Harman to MIT as individuals with knowledge relevant to this case for

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Page 3

many, many months. Regardless, MIT specifically and consciously decided not to depose either of these two witnesses, and expressly withdrew its notice of deposition with respect to Mr. Hanika-Heidl, even though we had prepared him to be deposed and had scheduled a deposition. We believe it is improper for MIT to now start conducting fact discovery of these two witnesses, more than two months after the close of fact discovery.

Regarding you item no. 9, this website was not intentionally removed. We can specifically state that its removal was not done at the request of counsel (outside or in-house), and its removal had nothing to do with this case, but was instead done in the normal course of business by the Harman Consumer Group. We too were surprised to see that it was no longer accessible. Harman's in-house counsel ordered the website restored and the site was reactivated on August 29 at its original URL ([www.trafficpro2.com](http://www.trafficpro2.com)).

Regarding your item no. 10, MIT declined our offer for MIT to purchase all but one of the earlier samples. Harman specifically made these samples for MIT at the beginning of the discovery period. MIT never requested any further samples during the fact discovery period, which is now closed. We believe the proper time for MIT to request samples of these products was during fact discovery. Furthermore, per my letter to Ms. Mottley of August 25, 2006, Harman has not yet received payment for the one sample which MIT did purchase several months ago.

Regarding your item no. 11, it was our understanding that MIT was not accusing the NTG4 of infringement. This was further evidenced by the reports of MIT's experts, which do not identify the NTG4 as an accused device. We already provided the most recent documents that were available during the period for fact discovery. Nevertheless, none of MIT's experts bothered to review those materials in connection with their infringement analyses.

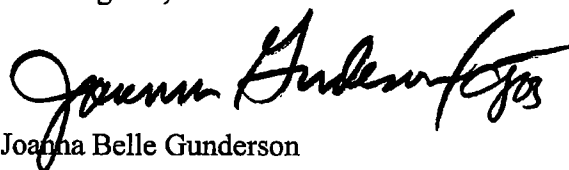
Regarding your item no. 12, after MIT's motion to compel filed on January 18, 2006, the parties agreed to a procedure by which the source code would be made available to MIT during the fact discovery period. The source code was available for many months, through the close of fact discovery. What is interesting to us is that after demanding access and even filing a premature motion to compel to gain access to the source code, MIT made no effort to review the source code, or even inquire about doing so during the fact discovery time period after we produced the source code. Fact discovery is now closed, and the source code is no longer at Sherin & Lodgen. Harman objects to any access to the source code by MIT's experts on the basis that it is untimely, should have been done before, and does not provide a legitimate basis for MIT to supplement any of its expert reports. To the extent that counsel for MIT wishes to review the source code under the understanding that it will not be shared with MIT's experts, we are willing to consider granting you such access.

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Regarding MIT's statement that refers to supplementing Mr. Belgard's report, since MIT had the opportunity to review Harman's source code and failed to make use of it during the appropriate time period, Harman specifically objects to MIT submitting any supplemental expert reports dealing with source code. Furthermore, it appears that even when an expert, specifically Dr. Grosz, expressed a need to see the source code or product samples, MIT did not provide that expert with access to either the source code or the product samples. All of MIT's experts, including Mr. Belgard, had ample opportunity to view the source code and to request sample devices during the fact discovery period. There is no legitimate basis for Mr. Belgard, or any of MIT's experts for that matter, to provide an untimely supplemental report to address information that could have, and should have been reviewed during the fact discovery period and addressed in opening expert reports—especially if their failure to do so was a result of MIT not providing access to or not making their experts aware of access to the source code and product samples.

Furthermore, many of the items that MIT is now requesting are things that likewise could have, and should have been addressed during fact discovery. For instance, had MIT reviewed the source code or even performed some simple follow up to Mr. Jeske's deposition, the need for many of these now untimely requests for production may have been realized. Fact discovery is now closed and expert discovery is nearing closure. MIT has had ample time to investigate these matters and to the extent that MIT intends to re-open fact discovery and attempt to submit untimely expert reports, Harman objects.

Best Regards,

A handwritten signature in black ink, appearing to read "Joanna Belle Gunderson". The signature is fluid and cursive, with the first name "Joanna" being the most prominent part.

Joanna Belle Gunderson

Attachments (2)



# **EXHIBIT I**

**IN THE UNITED STATES DISTRICT COURT  
DISTRICT OF MASSACHUSETTS**

**MASSACHUSETTS INSTITUTE OF  
TECHNOLOGY,**

**Plaintiff,**

**V.**

**HARMAN INTERNATIONAL INDUSTRIES,  
INCORPORATED,**

**Defendant.**

**Case No(s).: 05-10990 DPW**

**HARMAN'S SUPPLEMENTAL RESPONSES TO MIT'S FIRST SET OF INTERROGATORIES (NOS. 1-11)**

Pursuant to Rules 26 and 33 of the Federal Rules of Civil Procedure, defendant Harman International Industries Inc. (“Harman”) submits the following supplemental responses and objections to plaintiff Massachusetts Institute of Technology’s (“MIT’s”) First Set of Interrogatories (Nos. 1-11). These responses supersede and replace any earlier served responses.

## GENERAL OBJECTIONS

Harman incorporates its General Objections to MIT's First Set Of Requests For The Production Of Documents And Things (1-26) as if fully set forth herein.

Schmandt wrote any sections of the IDS or any of the claims. *Id.* at 48:21-23, 49:21-23.

Schmandt testified that he was “substantively involved” in the prosecution of the ‘685 patent

application, and in particular, involved with the IDS. Schmandt Dep. at 48:17-24; 81:2-18. He

also stated that Davis was more involved in the patent prosecution than he was. *Id.* at 49:6-10.

Regardless, of which story is correct and no matter where the fault lies, it is clear that there was material information withheld from the PTO during the prosecution of this patent. In addition, the motivations of the inventor(s), the affirmative misrepresentations present in the patent and thesis, and the seemingly unbelievable failure of anyone to locate and produce even requested documents to the PTO evidences the willfulness of these actions and meets the standards of inequitable conduct.

Harman further responds that this topic may be the subject matter of one or more future expert report(s), which, on completion and service on MIT, will be hereby incorporated by reference.

**Interrogatory No. 8:**

If Harman contends that any of the products and services identified by Interrogatory 1 do not infringe the claims of the ‘685 Patent, state the basis, including a claim chart, for such a contention.

**Supplemental Response to Interrogatory No. 8:**

Harman incorporates its objections to Interrogatory No. 1 as if fully set forth herein. Harman objects to Interrogatory No. 8 as premature, overly broad and unduly burdensome because the Court has yet to construe any of the claims of the ‘685 patent, and because MIT has failed to provide detailed positions with respect to infringement of several claims that MIT has “reserved the right” to assert, and has provided no infringement position with respect to a large number of Harman imported products for which MIT has also indicated may eventually be at issue in this case. In addition, in a letter dated June 12, 2006, MIT purports to assert the

following claims: 1, 2, 7-9, 11-13, 19, 21, 23, 24, 27-29, 32, 34-36, 40, 41-46, 48, 49, 54 and 56.

Accordingly, Harman limits its response to this interrogatory to those asserted claims. Harman

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objects to MIT's assertion of claims 2, 8-9, 12, 21, 24, 29, 36, 41-46 and 56, which MIT failed to assert in its preliminary infringement contentions. Harman further objects to this interrogatory as premature because responsive information is the subject of ongoing discovery and investigation, and will be the subject of expert analysis and testimony. Further, the Court has not provided its construction of disputed terms of the asserted claims. Accordingly, Harman reserves the right to supplement its responses to this interrogatory under Rule 26(e) of the Federal Rules of Civil Procedure after sufficient time for fact and expert discovery, once MIT finalizes its infringement and claim construction contentions, and, as necessary, upon the discovery of additional facts or construction by the Court.

Subject to its asserted objections, Harman refers MIT, pursuant to Rule 33(d) of the Federal Rules of Civil Procedure, to documents and things that Harman has made available for inspection, including without limitation documents bates numbered: HAR 000168-HAR 000759. Harman further responds that no Harman product infringes any claim of the '685 patent, and further refers MIT to the attached charts, which respond to MIT's infringement contentions to date. Harman further responds that, since each asserted claim is invalid, and it is legally impossible to infringe an invalid claim, none of the asserted claims are infringed for this additional reason, as well. Harman also refers MIT to its supplemental response to Interrogatory No. 9.

Harman further responds that, depending on the constructions adopted by the Court, each of the limitations of each asserted claim are found in multiple prior-art references, which can be combined in various ways to invalidate each claim. See enclosed claim chart.

Harman further responds that this topic may be the subject matter of one or more future expert report(s), which, on completion and service on MIT, will be hereby incorporated by reference.

**Interrogatory No. 9:**

State whether Harman has ever solicited or received, directly or indirectly, from any source, or prepared on its own any opinion, search, report or advice, written or oral, concerning the infringement, noninfringement, validity or enforceability of the '685 Patent, and identify all documents and prior art constituting, concerning, or identified by the opinion, search, report or advice, and all persons who prepared, presented or assisted in the preparation of such opinion, search, report or advice. If such opinion, search, report or advice was solicited but never received, identify all persons who made the inquiry or investigation.

**Supplemental Response to Interrogatory No. 9:**

Subject to its asserted objections, Harman refers MIT to the deposition testimony of Mr. Robert Hart, the documents produced in this matter by Brinks Hofer Gilson and Lione, and the documents produced by Harman in its voluntary waiver of privilege as a result of its reliance on its opinion of counsel. Harman further identifies the following documents:

HAR 006016-HAR 006020	HAR 006812
HAR 006036-HAR 006037	HAR 006839
HAR 006067	HAR 006866-HAR 006868
HAR 006083-HAR 006098	HAR 006879-HAR 006880
HAR 006131	HAR 006906-HAR 006907
HAR 006134-HAR 006137	HAR 006928
HAR 006146-HAR 006149	HAR 006941
HAR 006151-HAR 006152	HAR 006984
HAR 006192-HAR 006196	HAR 007005
HAR 006287	HAR 007009-HAR 007015
HAR 006290-HAR 006291	HAR 007021-HAR 007022
HAR 006307	HAR 007028-HAR 007030
HAR 006311	HAR 007041
HAR 006313-HAR 006314	HAR 007042-HAR 007048
HAR 006330	HAR 007050-HAR 007051
HAR 006337	HAR 007112
HAR 006340	HAR 007117-HAR 007119
HAR 006344	HAR 007130
HAR 006346	HAR 007134-HAR 007136
HAR 006349	HAR 007147-HAR 007148
HAR 006351	HAR 007154

'685 Patent	Non-infringement of the Traffic Pro Devices <sup>1</sup>	
1. An automobile navigation system which produces spoken instructions to direct a driver of an automobile to a destination in real time comprising:	MIT's infringement claim chart, which addresses only other products with respect to this preamble, sets forth no evidence relating to the issue of whether this preamble is met by the TrafficPro device.	
computing apparatus for running and coordinating system processes,		
driver input means functionally connected to said computing apparatus for entering data into said computing apparatus, said data including a desired destination,	The TrafficPro devices do not include this limitation. First, no TrafficPro has ever had a keyboard or equivalent structure. Second, the TrafficPro never allowed for entering data that includes a desired destination. Instead, a TrafficPro user would input a desired destination by selecting among data that has already been pre-input into the Harman U.S. system.	
a map database functionally connected to said computing apparatus which distinguishes between physical and legal connectivity,	As properly construed, the TrafficPro database does not "distinguish[]" between physical and legal connectivity."	
position sensing apparatus installed in the automobile and functionally connected to said computing apparatus for providing said computing apparatus data for determining the automobile's current position,	MIT's infringement claim chart, which addresses only other products with respect to this claim, sets forth no evidence relating to the issue of whether this claim is met by the TrafficPro device.  The GPS satellites referred to in MIT's infringement chart with respect to other devices are not "installed in the automobile," and GPS receivers are not position sensors. In addition, the TrafficPro, as sold by Harman, did not include any sensing apparatus for determining position. At most, the TrafficPro was sold with equipment that could be used by the system to determine heading, which is not position.	
a location system functionally connected to said computing apparatus for accepting data from said position sensing apparatus, for consulting said map database, and for determining the automobile's current position relative to the map database,	The TrafficPro did not determine any relative map position. Instead, it was based on absolute map locations. In addition, the TrafficPro did not use a map database as claimed for the reason set forth above.	
a route-finder functionally connected to said computing apparatus, for accepting the desired destination from said driver input means and the current position from said location system, for consulting said map database, and for computing a route to the destination,	As noted above, the TrafficPro did not include the required "driver input means" and "map database" recited in this limitation. In addition, the TrafficPro did not compute a route to the destination. Instead, the route finder took an iterative approach that interpolated a route from both ends - the beginning and end - until a route is chosen, as opposed to calculating a route to the desired destination.	
a discourse generator functionally connected to said computing apparatus for accepting the current position from said location system and the route from said route	The TrafficPro did not "compose discourse including instructions and other messages for directing the driver to the destination." First, it is unclear how MIT construes the term "discourse," but to the extent MIT requires something more for "discourse" other than the plain and ordinary meaning of "verbal expression in speech or	

<sup>1</sup> Note: MIT's infringement chart combines multiple devices, including both Traffic Pro and Traffic Pro II/7800, and also relies on information pertaining to a proposed, but never commercialized device, the NR2, which is not a TrafficPro device. MIT's reliance on the NR2 system for purposes of its infringement contention regarding the Traffic Pro system is misplaced and has been disregarded for purposes of this response. Harman objects to MIT's grouping these products together, and this chart is provided in response to the information cited by MIT that expressly or reasonably can be determined by Harman to refer to the Traffic Pro device.

finder, for consulting said map database, and for composing discourse including instructions and other messages for directing the driver to the destination from the current position.	writing," then the TrafficPro did not meet such requirements. Second, MIT's claim chart provides no basis to conclude that the TrafficPro provides "other information for directing the driver to the destination."
a speech generator functionally connected to said discourse generator for generating speech from said discourse provided by said discourse generator, and voice apparatus functionally connected to said speech generator for communicating said speech provided by said speech generator to said driver.	As sold by Harman, the TrafficPro system did not include any voice apparatus/speakers. The TrafficPro could be completely operational without being connected to speakers, and Harman is without sufficient knowledge as to which users may or may not have connected a TrafficPro system to other third-party speaker systems.
2. The automobile navigation system of claim 1 wherein said map database comprises a set of straight line segments and a set of nodes, each endpoint of each segment being a pointer to a node representing the coordinates of the endpoint and the set of other segments which are physically and legally connected to that endpoint.	This claim is not infringed because claim 1 is not infringed for the reasons stated above. In addition, nothing in MIT's infringement chart indicates the particular database arrangement is present in any TrafficPro device.
7. The automobile navigation system of claim 1 wherein said map database comprises a three-dimensional representation of street topology.	This claim is not infringed because claim 1 is not infringed for the reasons stated above. In addition, the TrafficPro map does not include three-dimensional representation of street topology. The third number included for some particular locations is only used to represent which roads are above others by use of a relative indicator (-1, 0, 1 or 2, for example), but this is not a third coordinate, and is not a three-dimensional representation of street topology.
8. The automobile navigation system of claim 1 wherein said map database includes measures of street quality.	This claim is not infringed because claim 1 is not infringed for the reasons stated above. In addition, the quality of the street is unimportant to (and not included in) the TrafficPro map, which instead relies on a relative rating of street functionality, in which even streets with relatively high functionality can be of poor street quality. The classes of roads in Harman's map database (cited in MIT's claim chart) are not based on street quality.
9. The automobile navigation system of claim 1 wherein said map database distinguishes divided streets.	This claim is not infringed because claim 1 is not infringed for the reasons stated above.
11. The automobile navigation system of claim 1 wherein said map database includes lane information.	This claim is not infringed because claim 1 is not infringed for the reasons stated above.
12. The automobile navigation system of claim 1 wherein said map database includes speed limits.	In addition, the TrafficPro database used in the U.S. does not include speed limits.
13. The automobile navigation system of claim 1 wherein said map database includes expected rate of travel.	MIT's infringement claim chart, which addresses only other products with respect to this claim, sets forth no evidence relating to the issue of whether this claim is met by the TrafficPro device.
	This claim is not infringed because claim 1 is not infringed for the reasons stated above. In addition, the TrafficPro database does not include expected rate of travel. Expected time of arrival ("ETA") should not be construed to be the same thing as the expected rate of travel. In addition, the claim requires that the expected rate be included within the database itself, so if the ETA is derived based on other information (either inside or outside of the database) then this should not be construed to be the same as including the expected travel time in the database itself.
19. The automobile navigation system of claim 1 wherein	This claim is not infringed because claim 1 is not infringed for the reasons stated above.



said map database includes a database of service locations.	
21. The automobile navigation system of claim 1 further comprising means for updating said map database.	MIT's infringement claim chart, which addresses only other products with respect to this claim, sets forth no evidence relating to the issue of whether this claim is met by the TrafficPro device.
	This claim is not infringed because claim 1 is not infringed for the reasons stated above. In addition, the TrafficPro does not include either the structure or functionality required by this limitation. The replacement of one complete database with a second, different, complete database is not the same as updating said (single) database. In addition, the TrafficPro database cannot be updated, altered, or replaced by use of a radio broadcast.
23. The automobile navigation system of claim 1 wherein the map has minimum accuracy of 10 meters.	MIT has not come forward with any evidence that purports to show infringement of this claim by any TrafficPro device.
24. The automobile navigation system of claim 1 wherein said route finder is based on a best-first search algorithm.	MIT has not come forward with any evidence that purports to show infringement of this claim by any TrafficPro device.
27. The automobile navigation system of claim 1 wherein said route finder is adapted to find a best route according to any one of three cost metrics: distance, speed, simplicity.	This claim is not infringed because claim 1 is not infringed for the reasons stated above. In addition, the TrafficPro cannot find a best route according to simplicity. Avoidance of highways should not be construed to be synonymous with simplicity.
28. The automobile navigation system of claim 1 wherein said route finder is adapted to calculate a new route if the driver or vehicle navigation system makes an error or if the route is un navigable due to unforeseen circumstances, wherein said new route does not simply backtrack to the point of the error if a better route from the current location exists.	This claim is not infringed because claim 1 is not infringed for the reasons stated above. In addition, the TrafficPro does not take into consideration any reason why a route must be recalculated and is indifferent as to why it must be done. The Traffic Pro route finder does not differentiate between having to recalculate due to errors (either by the user or the system) or un navigability due to circumstances (unforeseen or otherwise).
29. The automobile navigation system of claim 1 wherein said route finder is adapted to calculate a new route while the automobile is in motion, wherein said new route will begin from the location of the automobile at the time the calculation of the new route is completed.	MIT has not come forward with any evidence that purports to show infringement of this claim by any TrafficPro device.
32. The automobile navigation system of claim 1 wherein said location system is a position-keeping (dead-reckoning) system.	MIT has not come forward with any evidence that purports to show infringement of this claim by any TrafficPro device.
34. The automobile navigation system of claim 1 wherein said location system employs map matching.	This claim is not infringed because claim 1 is not infringed for the reasons stated above. In addition, MIT's infringement claim chart, which mentions only the NR2 system, sets forth no evidence relating to the issue of whether this limitation is present in the TrafficPro device.
35. The automobile navigation system of claim 1 wherein said position sensing apparatus comprises displacement and direction sensors installed in the automobile.	MIT's infringement claim chart, which addresses only other products with respect to this claim, sets forth no evidence relating to the issue of whether this claim is met by the TrafficPro device.  This claim is not infringed because claim 1 is not infringed for the reasons stated above. In addition, as sold by Harman, none of the TrafficPro systems included displacement sensors. Also, aside from a few early TrafficPro systems that were probably sold with connected compasses, none of the TrafficPro systems included anything installed in the vehicle that could sense direction.



36. The automobile navigation system of claim 1 wherein said position sensing apparatus measures displacement with an odometer.	MIT has not come forward with any evidence that purports to show infringement of this claim by any TrafficPro device.
40. The automobile navigation system of claim 1 wherein said position sensing apparatus measures direction with a gyroscope.	MIT's infringement claim chart, which addresses only other products with respect to this claim, sets forth no evidence relating to the issue of whether this claim is met by the TrafficPro device.  This claim is not infringed because claim 1 is not infringed for the reasons stated above. In addition, measuring the vehicle rate of change of the steering angle should not be construed to be the same as measuring direction.
41. The automobile navigation system of claim 1 wherein said discourse generator is based on an object-oriented programming methodology.	MIT's infringement claim chart, which addresses only other products with respect to this claim, sets forth no evidence relating to the issue of whether this claim is met by the TrafficPro device.  This claim is not infringed because claim 1 is not infringed for the reasons stated above. In addition, MIT's infringement claim chart, which mentions only the NR2 system, sets forth no evidence relating to the issue of whether this limitation is present in the TrafficPro device. In addition, whether the Human Machine Interface uses a layered software architecture and object oriented design is irrelevant to the issue of infringement of this claim. In addition, the TrafficPro does not use object-oriented programming for instruction generation/instruction giving.
42. The automobile navigation system of claim 1 wherein each intersection in a route is classified into one type in a taxonomy of intersection types, and the disclosure generated in relation to each said intersection depends on its type.	MIT's infringement claim chart, which addresses only other products with respect to this claim, sets forth no evidence relating to the issue of whether this claim is met by the TrafficPro device.  This claim is not infringed because claim 1 is not infringed for the reasons stated above.
43. The automobile navigation system of claim 42 wherein said taxonomy of intersection types includes continue, forced-turn, U-turn, enter, exit, onto-rotary, stay-on-rotary, exit-rotary, fork, turn, and stop.	MIT's infringement claim chart, which addresses only other products with respect to this claim, sets forth no evidence relating to the issue of whether this claim is met by the TrafficPro device.  This claim is not infringed because claims 1 and 42 are not infringed for the reasons stated above. In addition, the evidence cited in MIT's TrafficPro claim chart does not establish that any device includes each of the recited intersection types required by this claim.
44. The automobile navigation system of claim 42 wherein said discourse generated further depends on a description function for each intersection type which generates a description given the length and tense of the desired description and the position along the route from which an instruction is to be given.	MIT's infringement claim chart, which addresses only other products with respect to this claim, sets forth no evidence relating to the issue of whether this claim is met by the TrafficPro device.  This claim is not infringed because claims 1 and 42 are not infringed for the reasons stated above. In addition, the evidence cited in MIT's TrafficPro claim chart does not establish that any device satisfies this claim.
45. The automobile navigation system of claim 1 wherein said discourse generated comprises a long description of an act given substantially before the act is to be performed and a short description given at the time the act is to be performed.	This claim is not infringed because claim 1 is not infringed for the reasons stated above. In addition, this claim is not infringed because no instruction is given at the time the act is to be performed.
46. The automobile navigation system of claim 45 wherein	MIT has not come forward with any evidence that purports to show infringement of this claim by any

said long descriptions includes cues.	TrafficPro device.
48. The automobile navigation system of claim 1 wherein said driver input means includes means for said driver to demand immediate instructions, or clarification or repetition of instructions already provided.	This claim is not infringed because claim 1 is not infringed for the reasons stated above. In addition, the TrafficPro does not include any means to demand clarification or repetition of instructions, and the evidence cited by MIT in its TrafficPro infringement chart does not purport to show otherwise.
49. The automobile navigation system of claim 1 wherein said driver input means includes means for said driver to indicate to said automobile navigation system that a given instruction provided by said system is impossible to complete for some reason and that a new route must be calculated.	MIT's infringement claim chart, which addresses only other products with respect to this claim, sets forth no evidence relating to the issue of whether this claim is met by the TrafficPro device.  This claim is not infringed because claim 1 is not infringed for the reasons stated above. In addition, the TrafficPro does not include any way for a user to indicate that a given instruction provided by said system is impossible to complete for some reason. At most, the Harman systems simply include a way to request a new route calculation, without providing any such explanation or reason for the requirement.
54. The automobile navigation system of claim 1 wherein said discourse generator is responsive to a user-model stored in said computing apparatus to customize discourse to the requirements and preferences of said driver.	MIT's infringement claim chart, which addresses only other products with respect to this claim, sets forth no evidence relating to the issue of whether this claim is met by the TrafficPro device.  This claim is not infringed because claim 1 is not infringed for the reasons stated above. In addition, the option to choose between a particular language or a male or female voice that is not stored as a user-model, and/or which does not affect or customize in any way the discourse should not be construed to be within the scope of this claim.
56. The automobile navigation system of claim 1 wherein said speech generator uses digitized speech.	MIT's infringement claim chart, which addresses only other products (including non-U.S. products) with respect to this claim, sets forth no evidence relating to the issue of whether this claim is met by the TrafficPro device.  This claim is not infringed because claim 1 is not infringed for the reasons stated above.

685 Patent	Non-infringement of the Traffic Pro II/7800 Devices <sup>1</sup>
1. An automobile navigation system which produces spoken instructions to direct a driver of an automobile to a destination in real time comprising:	
computing apparatus for running and coordinating system processes,	MIT's infringement claim chart, which addresses only other products with respect to this limitation, sets forth no evidence relating to the issue of whether this limitation is met by the Traffic Pro II/7800 devices.
driver input means functionally connected to said computing apparatus for entering data into said computing apparatus, said data including a desired destination,	None of the Traffic Pro II/7800 devices include this limitation. First, no Traffic Pro II/7800 has ever had a keyboard or equivalent structure. Second, the Traffic Pro II/7800 never allowed for entering data including a desired destination. Instead, a Traffic Pro II/7800 user would enter a desired destination by selecting among data that has already been pre-input into the Harman U.S. system.
a map database functionally connected to said computing apparatus which distinguishes between physical and legal connectivity,	As properly construed, the Traffic Pro II/7800 database does not "distinguish[]" between physical and legal connectivity."
position sensing apparatus installed in the automobile and functionally connected to said computing apparatus for providing said computing apparatus data for determining the automobile's current position,	The GPS satellites referred to in MIT's infringement chart are not "installed in the automobile." In addition, the Traffic Pro II/7800, as sold by Harman, did not include any sensing apparatus for determining position. At most, the Traffic Pro II/7800 was sold with equipment that could be used by the system to determine heading, which is not position.
a location system functionally connected to said computing apparatus for accepting data from said position sensing apparatus, for consulting said map database, and for determining the automobile's current position relative to the map database,	The Traffic Pro II/7800 did not determine any relative map position. Instead, it was based on absolute map locations. In addition, the Traffic Pro II/7800 did not use a map database as claimed for the reason set forth above.
a route-finder functionally connected to said computing apparatus, for accepting the desired destination from said driver input means and the current position from said location system, for consulting said map database, and for computing a route to the destination,	As noted above, the Traffic Pro II/7800 did not include the required "driver input means" and "map database" recited in this limitation. In addition, the Traffic Pro II/7800 did not compute a route to the destination. Instead, the route finder took an iterative approach that interpolated a route from both ends - the beginning and end - until a route is chosen, as opposed to calculating a route to the desired destination.
a discourse generator functionally connected to said computing apparatus for accepting the current position from said location system and the route from said route finder, for consulting said map database, and for composing discourse including instructions and other messages for directing the driver to the destination from	The Traffic Pro II/7800 did not "compose discourse including instructions and other messages for directing the driver to the destination." First, it is unclear how MIT construes the term "discourse," but to the extent MIT requires something more for "discourse" other than the plain and ordinary meaning of "Verbal expression in speech or writing," then the TrafficPro II/7800 did not meet such requirements, because it was not based on any discourse or linguistics theory. Second, MIT's claim chart provides no evidence that the Traffic Pro II/7800 provides "other information for directing the driver to the destination."

1 Note: MIT's infringement chart combines multiple devices, including both Traffic Pro and Traffic Pro II/7800, and also relies on information pertaining to a proposed, but never commercialized device, the NR2, which is not a TrafficPro device. MIT's reliance on the NR2 system for purposes of its infringement contention regarding the Traffic Pro II/7800 systems is misplaced and has been disregarded for purposes of this response. Harman objects to MIT's grouping these products together, and this chart is provided in response to the information cited by MIT that expressly or reasonably can be determined by Harman to refer to the Traffic Pro II/7800 devices.

the current position.	
a speech generator functionally connected to said discourse generator for generating speech from said discourse provided by said discourse generator, and	MIT's infringement claim chart, which addresses only other products with respect to this limitation, sets forth no evidence relating to the issue of whether this limitation is met by the Traffic Pro II/7800 device.
voice apparatus functionally connected to said speech generator for communicating said speech provided by said speech generator to said driver.	In addition, MIT has not identified any speech generator in its claim chart, but merely cites to passages that indicate that audio may be outputted by other systems. As sold by Harman, the Traffic Pro II/7800 system did not include any voice apparatus/speakers. The Traffic Pro II/7800 could be completely operational without being connected to speakers, and Harman is without sufficient knowledge as to which users may or may not have connected a Traffic Pro II/7800 system to other third-party speaker systems.
2. The automobile navigation system of claim 1 wherein said map database comprises a set of straight line segments and a set of nodes, each endpoint of each segment being a pointer to a node representing the coordinates of the endpoint and the set of other segments which are physically and legally connected to that endpoint.	This claim is not infringed because claim 1 is not infringed for the reasons stated above. In addition, nothing in MIT's infringement chart indicates the particular "pointer" arrangement is present in any Traffic Pro II/7800 device.
7. The automobile navigation system of claim 1 wherein said map database comprises a three-dimensional representation of street topology.	This claim is not infringed because claim 1 is not infringed for the reasons stated above. In addition, the Traffic Pro II/7800 map does not include three-dimensional representation of street topology. The third number included for some particular locations is only used to represent which roads are above others by use of a relative indicator (-1, 0, 1 or 2, for example), but this is not a third coordinate, and is not a three-dimensional representation of street topology.
8. The automobile navigation system of claim 1 wherein said map database includes measures of street quality.	This claim is not infringed because claim 1 is not infringed for the reasons stated above. In addition, the quality of the street is unimportant to (and not included in) the Traffic Pro II/7800 map, which instead relies on a relative rating of street functionality, in which even streets with relatively high functionality can be of poor street quality. The classes of roads in Harman's map database (cited in MIT's claim chart) are not based on street quality.
9. The automobile navigation system of claim 1 wherein said map database distinguishes divided streets.	This claim is not infringed because claim 1 is not infringed for the reasons stated above.
11. The automobile navigation system of claim 1 wherein said map database includes lane information.	This claim is not infringed because claim 1 is not infringed for the reasons stated above.
12. The automobile navigation system of claim 1 wherein said map database includes speed limits.	This claim is not infringed because claim 1 is not infringed for the reasons stated above. In addition, the Traffic Pro II/7800 database used in the U.S. does not include speed limits.
13. The automobile navigation system of claim 1 wherein said map database includes expected rate of travel.	This claim is not infringed because claim 1 is not infringed for the reasons stated above. In addition, the Traffic Pro II/7800 database does not include expected rate of travel. This term has not been construed, but under a proper construction, expected time of arrival ("ETA") should not be the same thing as the expected rate of travel. In addition, the claim requires that the expected rate be included within the database itself, so if the ETA is derived based on other information (either inside or outside of the database) then this should not be the same as including the expected travel time in the database itself.
19. The automobile navigation system of claim 1 wherein said map database includes a database of service locations.	This claim is not infringed because claim 1 is not infringed for the reasons stated above.
21. The automobile navigation system of claim 1 further comprising means for updating said map database.	This claim is not infringed because claim 1 is not infringed for the reasons stated above. In addition, the Traffic Pro II/7800 does not include either the structure or functionality required by this



23. The automobile navigation system of claim 1 wherein the map has minimum accuracy of 10 meters.	limitation. The replacement of one complete database with a second, different, complete database is not the same as updating <i>said</i> (single) database. In addition, the Traffic Pro II/7800 database cannot be updated, altered, or replaced by use of a radio broadcast.
24. The automobile navigation system of claim 1 wherein said route finder is based on a best-first search algorithm.	MIT has not come forward with any evidence that purports to show infringement of this claim by any Traffic Pro II/7800 device.
27. The automobile navigation system of claim 1 wherein said route finder is adapted to find a best route according to any one of three cost metrics: distance, speed, simplicity.	MIT has not come forward with any evidence that purports to show infringement of this claim by any Traffic Pro II/7800 device.  This claim is not infringed because claim 1 is not infringed for the reasons stated above. In addition, the Traffic Pro II/7800 cannot find a best route according to simplicity. Avoidance of highways should not be construed to be synonymous with simplicity.
28. The automobile navigation system of claim 1 wherein said route finder is adapted to calculate a new route if the driver or vehicle navigation system makes an error or if the route is un navigable due to unforeseen circumstances, wherein said new route does not simply backtrack to the point of the error if a better route from the current location exists.	This claim is not infringed because claim 1 is not infringed for the reasons stated above. In addition, the Traffic Pro II/7800 does not take into consideration any reason why a route must be recalculated and is indifferent as to why it must be done. The Traffic Pro route finder does not differentiate between having to recalculate due to errors (either by the user or the system) or unnavigability due to circumstances (unforeseen or otherwise).
29. The automobile navigation system of claim 1 wherein said route finder is adapted to calculate a new route while the automobile is in motion, wherein said new route will begin from the location of the automobile at the time the calculation of the new route is completed.	MIT has not come forward with any evidence that purports to show infringement of this claim by any Traffic Pro II/7800 device.
32. The automobile navigation system of claim 1 wherein said location system is a position-keeping (dead-reckoning) system.	MIT has not come forward with any evidence that purports to show infringement of this claim by any Traffic Pro II/7800 device.
34. The automobile navigation system of claim 1 wherein said location system employs map matching.	MIT's infringement claim chart, which addresses only other products with respect to this limitation, sets forth no evidence relating to the issue of whether this limitation is met by the Traffic Pro II/7800 device.
35. The automobile navigation system of claim 1 wherein said position sensing apparatus comprises displacement and direction sensors installed in the automobile.	This claim is not infringed because claim 1 is not infringed for the reasons stated above.  This claim is not infringed because claim 1 is not infringed for the reasons stated above. In addition, as sold by Harman, none of the Traffic Pro II/7800 systems included displacement sensors. Also, aside from the possibility that a few early Traffic Pro II/7800 systems that may have been sold with connected compasses, none of the Traffic Pro II/7800 systems included anything installed in the vehicle that could sense direction.
36. The automobile navigation system of claim 1 wherein said position sensing apparatus measures displacement with an odometer.	MIT has not come forward with any evidence that purports to show infringement of this claim by any Traffic Pro II/7800 device.
40. The automobile navigation system of claim 1 wherein said position sensing apparatus measures direction with a gyroscope.	This claim is not infringed because claim 1 is not infringed for the reasons stated above. In addition, measuring the vehicle rate of change of the steering angle should be construed to be different than measuring direction.
41. The automobile navigation system of claim 1 wherein	MIT's infringement claim chart, which addresses only other products with respect to this limitation, sets forth no

said discourse generator is based on an object-oriented programming methodology.	evidence relating to the issue of whether this limitation is met by the Traffic Pro II/7800 device. This claim is not infringed because claim 1 is not infringed for the reasons stated above. In addition, whether the Human Machine Interface uses a layered software architecture and object oriented design is irrelevant to the issue of infringement of this claim. In addition, the Traffic Pro II/7800 does not use object-oriented programming for instruction generation/instruction giving.
42. The automobile navigation system of claim 1 wherein each intersection in a route is classified into one type in a taxonomy of intersection types, and the disclosure generated in relation to each said intersection depends on its type.	This claim is not infringed because claim 1 is not infringed for the reasons stated above.
43. The automobile navigation system of claim 42 wherein said taxonomy of intersection types includes continue, forced-turn, U-turn, enter, exit, onto-rotary, stay-on-rotary, exit-rotary, fork, turn, and stop.	This claim is not infringed because claims 1 and 42 are not infringed for the reasons stated above. In addition, the evidence cited in MIT's Traffic Pro II/7800 claim chart does not establish that the Traffic Pro II/7800 includes each of the recited intersection types required by this claim.
44. The automobile navigation system of claim 42 wherein said discourse generated further depends on a description function for each intersection type which generates a description given the length and tense of the desired description and the position along the route from which an instruction is to be given.	This claim is not infringed because claims 1 and 42 are not infringed for the reasons stated above. In addition, the evidence cited in MIT's Traffic Pro II/7800 claim chart does not establish that the Traffic Pro II/7800 satisfies this claim.
45. The automobile navigation system of claim 1 wherein said discourse generated comprises a long description of an act given substantially before the act is to be performed and a short description given at the time the act is to be performed.	MIT's infringement claim chart, which addresses only other products with respect to this limitation, sets forth no evidence relating to the issue of whether this limitation is met by the Traffic Pro II/7800 device. In addition, this claim is not infringed because claim 1 is not infringed for the reasons stated above. In addition, this claim is not infringed because no instruction is given at the time the act is to be performed.
46. The automobile navigation system of claim 45 wherein said long descriptions includes cues.	MIT has not come forward with any evidence that purports to show infringement of this claim by any Traffic Pro II/7800 device.
49. The automobile navigation system of claim 1 wherein said driver input means includes means for said driver to indicate to said automobile navigation system that a given instruction provided by said system is impossible to complete for some reason and that a new route must be calculated.	MIT's infringement claim chart, which addresses only other products with respect to this limitation, sets forth no evidence relating to the issue of whether this limitation is met by the Traffic Pro II/7800 device. In addition, this claim is not infringed because claim 1 is not infringed for the reasons stated above. In addition, the Traffic Pro II/7800 does not include any way for a user to indicate that a given instruction provided by said system is impossible to complete for some reason. At most, the Harman systems simply include a way to request a new route calculation, without providing any such explanation or reason for the requirement.
54. The automobile navigation system of claim 1 wherein said discourse generator is responsive to a user-model stored in said computing apparatus to customize discourse to the requirements and preferences of said driver.	MIT's infringement claim chart, which addresses only other products with respect to this limitation, sets forth no evidence relating to the issue of whether this limitation is met by the Traffic Pro II/7800 device. In addition, this claim is not infringed because claim 1 is not infringed for the reasons stated above. In addition, the Traffic Pro II/7800 does not include such a feature, and MIT's infringement chart provides no basis for concluding otherwise. The option to choose between a particular language or a male or female voice

56. The automobile navigation system of claim 1 wherein said speech generator uses digitized speech.	that is not stored as a user-model, and/or which does not affect or customize in any way the discourse should not be construed to be within the scope of this claim. MIT's infringement claim chart, which addresses only other products with respect to this limitation, sets forth no evidence relating to the issue of whether this limitation is met by the Traffic Pro II/7800 device. In addition, this claim is not infringed because claim 1 is not infringed for the reasons stated above.
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685 Patent	Non-Infringement of the RB4 Device <sup>1</sup>
1. An automobile navigation system which produces spoken instructions to direct a driver of an automobile to a destination in real time comprising:	
computing apparatus for running and coordinating system processes,	
driver input means functionally connected to said computing apparatus for entering data into said computing apparatus, said data including a desired destination,	None of the RB4 devices include this limitation. First, no RB4 has ever had a keyboard or equivalent structure. Second, the RB4 never allowed for entering a desired destination. Instead, an RB4 user would select among data that has already been pre-input into the Harman U.S. system.
a map database functionally connected to said computing apparatus which distinguishes between physical and legal connectivity,	As properly construed, the RB4 database does not "distinguish[] between physical and legal connectivity."
position sensing apparatus installed in the automobile and functionally connected to said computing apparatus for providing said computing apparatus data for determining the automobile's current position,	The GPS satellites referred to in MIT's infringement chart are not "installed in the automobile," and GPS receivers are not position sensors. In addition, the RB4, as sold by Harman, did not include any sensing apparatus for determining position. At most, the RB4 was sold with equipment that could be used by the system to determine heading, which is not position.
a location system functionally connected to said computing apparatus for accepting data from said position sensing apparatus, for consulting said map database, and for determining the automobile's current position relative to the map database,	The RB4 did not determine any relative map position. Instead, it was based on absolute map locations. In addition, the RB4 did not use a map database as claimed for the reason set forth above.
a route-finder functionally connected to said computing apparatus, for accepting the desired destination from said driver input means and the current position from said location system, for consulting said map database, and for computing a route to the destination,	As noted above, the RB4 did not include the required "driver input means" and "map database" recited in this limitation. In addition, the RB4 did not compute a route to the destination. Instead, the route finder took an iterative approach that interpolated a route from both ends - the beginning and end - until a route is chosen, as opposed to calculating a route to the desired destination.
a discourse generator functionally connected to said computing apparatus for accepting the current position from said location system and the route from said route finder, for consulting said map database, and for composing discourse including instructions and other messages for directing the driver to the destination from the current position.	The RB4 did not "compose discourse including instructions and other messages for directing the driver to the destination." First, it is unclear how MIT construes the term "discourse," but to the extent MIT requires something more for "discourse" other than the plain and ordinary meaning of "Verbal expression in speech or writing," then the RB4 did not meet such requirements. Second, MIT's claim chart provides no basis to conclude that the RB4 provided "other information for directing the driver to the destination."
a speech generator functionally connected to said discourse generator for generating speech from said	MIT has not identified any speech generator in its claim chart with respect to the RB4, but merely cites to passages that indicate that audio may be outputted by the system.

<sup>1</sup> To the extent MIT contends that RB3 devices, which were not sold in the United States, are within the scope of this case, Harman's arguments with respect to RB4 apply equally to the RB3 system, as well.



discourse provided by said discourse generator, and voice apparatus functionally connected to said speech generator for communicating said speech provided by said speech generator to said driver.	As sold by Harman, the RB4 system did not include any voice apparatus/speakers. The RB4 could be completely operational without being connected to speakers, and Harman is without sufficient knowledge as to which users may or may not have connected a RB4 system to other third-party speaker systems.
2. The automobile navigation system of claim 1 wherein said map database comprises a set of straight line segments and a set of nodes, each endpoint of each segment being a pointer to a node representing the coordinates of the endpoint and the set of other segments which are physically and legally connected to that endpoint.	This claim is not infringed because claim 1 is not infringed for the reasons stated above. In addition, nothing in MIT's infringement chart provides a basis to conclude that the particular database arrangement is present in any RB4 device.
7. The automobile navigation system of claim 1 wherein said map database comprises a three-dimensional representation of street topology.	This claim is not infringed because claim 1 is not infringed for the reasons stated above. In addition, the RB4 map does not include three-dimensional representation of street topology. The third number included for some particular locations is only used to represent which roads are above others by use of a relative indicator (-1, 0, 1 or 2, for example), but this is not a third coordinate, and is not a three-dimensional representation of street topology. In addition, this claim requires the map itself include such a representation and does not cover the use of GPS to determine altitude.
8. The automobile navigation system of claim 1 wherein said map database includes measures of street quality.	This claim is not infringed because claim 1 is not infringed for the reasons stated above. In addition, the quality of the street is unimportant to (and not included in) the RB4 map, which instead relies on a relative rating of street functionality, in which even streets with relatively high functionality can be of poor street quality. The classes of roads in Harman's map database (cited in MIT's claim chart) are not based on street quality.
9. The automobile navigation system of claim 1 wherein said map database distinguishes divided streets.	This claim is not infringed because claim 1 is not infringed for the reasons stated above.
11. The automobile navigation system of claim 1 wherein said map database includes lane information.	This claim is not infringed because claim 1 is not infringed for the reasons stated above.
12. The automobile navigation system of claim 1 wherein said map database includes speed limits.	This claim is not infringed because claim 1 is not infringed for the reasons stated above. In addition, the RB4 database used in the U.S. does not include speed limits.
13. The automobile navigation system of claim 1 wherein said map database includes expected rate of travel.	This claim is not infringed because claim 1 is not infringed for the reasons stated above. In addition, the RB4 database does not include expected rate of travel. Expected time of arrival ("ETA") should not be construed to be the same thing as the expected rate of travel. In addition, the claim requires that the expected rate be included within the database itself, so if the ETA is derived based on other information (either inside or outside of the database) then this should not be construed to be the same as including the expected travel time in the database itself.
19. The automobile navigation system of claim 1 wherein said map database includes a database of service locations.	This claim is not infringed because claim 1 is not infringed for the reasons stated above.
21. The automobile navigation system of claim 1 further comprising means for updating said map database.	This claim is not infringed because claim 1 is not infringed for the reasons stated above. In addition, the RB4 does not include either the structure or functionality required by this limitation. The replacement of one complete database with a second, different, complete database is not the same as updating said (single) database. In addition, the RB4 database cannot be updated, altered, or replaced by use of a radio broadcast.
23. The automobile navigation system of claim 1 wherein	MIT has not come forward with any evidence that purports to show infringement of this claim by any

the map has minimum accuracy of 10 meters.	<b>RB4 device.</b>
24. The automobile navigation system of claim 1 wherein said route finder is based on a best-first search algorithm.	<b>MIT has not come forward with any evidence that purports to show infringement of this claim by any TrafficPro device.</b>
27. The automobile navigation system of claim 1 wherein said route finder is adapted to find a best route according to any one of three cost metrics: distance, speed, simplicity.	This claim is not infringed because claim 1 is not infringed for the reasons stated above. In addition, the RB4 cannot find a best route according to simplicity. Avoidance of highways should not be construed to be synonymous with simplicity.
28. The automobile navigation system of claim 1 wherein said route finder is adapted to calculate a new route if the driver or vehicle navigation system makes an error or if the route is un navigable due to unforeseen circumstances, wherein said new route does not simply backtrack to the point of the error if a better route from the current location exists.	This claim is not infringed because claim 1 is not infringed for the reasons stated above. In addition, the RB4 does not take into consideration any reason why a route must be recalculated and is indifferent as to why it must be done. The RB4 route finder does not differentiate between having to recalculate due to errors (either by the user or the system) or unnavigability due to circumstances (unforeseen or otherwise).
29. The automobile navigation system of claim 1 wherein said route finder is adapted to calculate a new route while the automobile is in motion, wherein said new route will begin from the location of the automobile at the time the calculation of the new route is completed.	This claim is not infringed because claim 1 is not infringed for the reasons stated above. In addition, the RB4 does not determine where the automobile will be at the time the calculation of the new route is completed and is not adapted to calculate a new route to begin at such a location.
32. The automobile navigation system of claim 1 wherein said location system is a position-keeping (dead-reckoning) system.	This claim is not infringed because claim 1 is not infringed for the reasons stated above.
34. The automobile navigation system of claim 1 wherein said location system employs map matching.	This claim is not infringed because claim 1 is not infringed for the reasons stated above.
35. The automobile navigation system of claim 1 wherein said position sensing apparatus comprises displacement and direction sensors installed in the automobile.	This claim is not infringed because claim 1 is not infringed for the reasons stated above. In addition, as sold by Harman, none of the RB4 systems included displacement sensors or anything installed in the vehicle that could sense direction.
36. The automobile navigation system of claim 1 wherein said position sensing apparatus measures displacement with an odometer.	<b>MIT has not come forward with any evidence that purports to show infringement of this claim by any RB4 device.</b>
40. The automobile navigation system of claim 1 wherein said position sensing apparatus measures direction with a gyroscope.	This claim is not infringed because claim 1 is not infringed for the reasons stated above. In addition, supplying a signal that is proportional to the rotational rate should not be construed to be synonymous with measuring direction.
41. The automobile navigation system of claim 1 wherein said discourse generator is based on an object-oriented programming methodology.	This claim is not infringed because claim 1 is not infringed for the reasons stated above. In addition, the RB4 does not use object-oriented programming for instruction generation/instruction giving, and nothing in MIT's chart provides any evidence to the contrary.
42. The automobile navigation system of claim 1 wherein each intersection in a route is classified into one type in a taxonomy of intersection types, and the discourse generated in relation to each said intersection depends on its type.	This claim is not infringed because claim 1 is not infringed for the reasons stated above.

43. The automobile navigation system of claim 42 wherein said taxonomy of intersection types includes continue, forced-turn, U-turn, enter, exit, onto-rotary, stay-on-rotary, exit-rotary, fork, turn, and stop.	This claim is not infringed because claims 1 and 42 are not infringed for the reasons stated above. In addition, the evidence cited in MIT's RB4 claim chart does not establish that any device includes each of the recited intersection types required by this claim.
44. The automobile navigation system of claim 42 wherein said discourse generated further depends on a description function for each intersection type which generates a description given the length and tense of the desired description and the position along the route from which an instruction is to be given.	This claim is not infringed because claims 1 and 42 are not infringed for the reasons stated above. In addition, the evidence cited in MIT's RB4 claim chart does not establish that any device satisfies this claim.
45. The automobile navigation system of claim 1 wherein said discourse generated comprises a long description of an act given substantially before the act is to be performed and a short description given at the time the act is to be performed.	This claim is not infringed because claim 1 is not infringed for the reasons stated above. In addition, the evidence cited in MIT's chart establishes that no instructions or descriptions are given at the time the act is to be performed, but instead are provided earlier, in advance of such time.
46. The automobile navigation system of claim 45 wherein said long descriptions includes cues.	This claim is not infringed because claims 1 and 45 are not infringed for the reasons stated above.
48. The automobile navigation system of claim 1 wherein said driver input means includes means for said driver to demand immediate instructions, or clarification or repetition of instructions already provided.	In addition, the evidence cited in MIT's chart provides no basis for concluding that this limitation is met. This claim is not infringed because claim 1 is not infringed for the reasons stated above. In addition, the RB4 does not include any means to demand clarification of instructions, and does not include a true "repeat" function, contrary to the statements in the user manual.
49. The automobile navigation system of claim 1 wherein said driver input means includes means for said driver to indicate to said automobile navigation system that a given instruction provided by said system is impossible to complete for some reason and that a new route must be calculated.	This claim is not infringed because claim 1 is not infringed for the reasons stated above. In addition, the RB4 does not include any way for a user to indicate that a given instruction provided by said system is impossible to complete for some reason. At most, the Harman systems simply include a way to request a new route calculation, without providing any such explanation or reason for the requirement.
54. The automobile navigation system of claim 1 wherein said discourse generator is responsive to a user-model stored in said computing apparatus to customize discourse to the requirements and preferences of said driver.	This claim is not infringed because claim 1 is not infringed for the reasons stated above. In addition, the option to choose between a particular language that is not stored as a user-model, and/or which does not affect or customize in any way the discourse should not be construed to be within the scope of this claim.
56. The automobile navigation system of claim 1 wherein said speech generator uses digitized speech.	This claim is not infringed because claim 1 is not infringed for the reasons stated above.

'685 Patent	Non-Infringement of the Harley-Davidson Device
1. An automobile navigation system which produces spoken instructions to direct a driver of an automobile to a destination in real time comprising:	
computing apparatus for running and coordinating system processes,	
driver input means functionally connected to said computing apparatus for entering data into said computing apparatus, said data including a desired destination,	The Harley-Davidson device does not include this limitation. First, no Harley-Davidson device has ever had a keyboard or equivalent structure. Second, the Harley-Davidson device does not allow for entering data that includes a desired destination. Instead, a Harley-Davidson device user would select among data that has already been pre-input into the system.
a map database functionally connected to said computing apparatus which distinguishes between physical and legal connectivity,	As properly construed, the Harley-Davidson device database does not "distinguish[]" between physical and legal connectivity."
position sensing apparatus installed in the automobile and functionally connected to said computing apparatus for providing said computing apparatus data for determining the automobile's current position,	GPS satellites are not "installed in the automobile," and GPS receivers are not position sensors. In addition, the Harley-Davidson device, as sold by Harman, does not include any sensing apparatus for determining position. At most, the Harley-Davidson device was sold with equipment that could be used by the system to determine heading, which is not position.
a location system functionally connected to said computing apparatus for accepting data from said position sensing apparatus, for consulting said map database, and for determining the automobile's current position relative to the map database,	The Harley-Davidson device does not determine any relative map position. Instead, it is based on absolute map locations. In addition, the Harley-Davidson device does not use a map database as claimed for the reason set forth above.
a route-finder functionally connected to said computing apparatus, for accepting the desired destination from said driver input means and the current position from said location system, for consulting said map database, and for computing a route to the destination,	As noted above, the Harley-Davidson device does not include the required "driver input means" and "map database" recited in this limitation. In addition, the Harley-Davidson device does not compute a route to the destination. Instead, the route finder takes an iterative approach that interpolates a route from both ends - the beginning and end - until a route is chosen, as opposed to calculating a route to the desired destination.
a discourse generator functionally connected to said computing apparatus for accepting the current position from said location system and the route from said route finder, for consulting said map database, and for composing discourse including instructions and other messages for directing the driver to the destination from the current position.	The Harley-Davidson device does not "compose discourse including instructions and other messages for directing the driver to the destination." First, it is unclear how MIT constructs the term "discourse," but to the extent MIT requires something more for "discourse" other than the plain and ordinary meaning of "Verbal expression in speech or writing," then the Harley-Davidson device does not meet such requirements. Second, MIT's claim chart provides no basis to conclude that the Harley-Davidson device provides "other information for directing the driver to the destination."
a speech generator functionally connected to said discourse generator for generating speech from said discourse provided by said discourse generator, and	MIT has not identified any speech generator in its claim chart with respect to the Harley-Davidson device, but merely cites to passages that indicate that audio may be outputted by the system.
voice apparatus functionally connected to said speech generator for communicating said speech provided by said speech generator to said driver.	
2. The automobile navigation system of claim 1 wherein said map database comprises a set of straight line segments	This claim is not infringed because claim 1 is not infringed for the reasons stated above. In addition, nothing in MIT's infringement chart indicates the particular database arrangement is present in any



and a set of nodes, each endpoint of each segment being a pointer to a node representing the coordinates of the endpoint and the set of other segments which are physically and legally connected to that endpoint.	Harley-Davidson device.
7. The automobile navigation system of claim 1 wherein said map database comprises a three-dimensional representation of street topology.	This claim is not infringed because claim 1 is not infringed for the reasons stated above. In addition, the Harley-Davidson device map does not include three-dimensional representation of street topology. The third number included for some particular locations is only used to represent which roads are above others by use of a relative indicator (-1, 0, 1 or 2, for example), but this is not a third coordinate, and is not a three-dimensional representation of street topology. In addition, this claim requires the map itself include such a representation and does not cover the use of GPS to determine altitude.
8. The automobile navigation system of claim 1 wherein said map database includes measures of street quality.	This claim is not infringed because claim 1 is not infringed for the reasons stated above. In addition, the quality of the street is unimportant to (and not included in) the Harley-Davidson device map, which instead relies on a relative rating of street functionality, in which even streets with relatively high functionality can be of poor street quality. The classes of roads in Harman's map database (cited in MIT's claim chart) are not based on street quality.
9. The automobile navigation system of claim 1 wherein said map database distinguishes divided streets.	This claim is not infringed because claim 1 is not infringed for the reasons stated above.
11. The automobile navigation system of claim 1 wherein said map database includes lane information.	This claim is not infringed because claim 1 is not infringed for the reasons stated above.
12. The automobile navigation system of claim 1 wherein said map database includes speed limits.	This claim is not infringed because claim 1 is not infringed for the reasons stated above. In addition, the Harley-Davidson device database used in the U.S. does not include speed limits.
13. The automobile navigation system of claim 1 wherein said map database includes expected rate of travel.	This claim is not infringed because claim 1 is not infringed for the reasons stated above. In addition, the Harley-Davidson device database does not include expected rate of travel. Expected time of arrival ("ETA") should not be construed to be the same thing as the expected rate of travel. In addition, the claim requires that the expected rate be included within the database itself, so if the ETA is derived based on other information (either inside or outside of the database) then this should not be construed to be the same as including the expected travel time in the database itself.
19. The automobile navigation system of claim 1 wherein said map database includes a database of service locations.	This claim is not infringed because claim 1 is not infringed for the reasons stated above.
21. The automobile navigation system of claim 1 further comprising means for updating said map database.	This claim is not infringed because claim 1 is not infringed for the reasons stated above. In addition, the Harley-Davidson device does not include either the structure or functionality required by this limitation. The replacement of one complete database with a second, different complete database is not the same as updating <i>said</i> (single) database. In addition, the Harley-Davidson device database cannot be updated, altered, or replaced by use of a radio broadcast.
23. The automobile navigation system of claim 1 wherein the map has minimum accuracy of 10 meters.	This claim is not infringed because claim 1 is not infringed for the reasons stated above. In addition, MIT's claim chart provides no basis for infringement because it relies on the GPS system and its ability to track a vehicle within a certain accuracy. However, this claim requires that the map database itself (not the entire system) have a certain level of accuracy, which is not present in the map database used by the Harley-Davidson device.
24. The automobile navigation system of claim 1 wherein said route finder is based on a best-first search algorithm.	MIT has not come forward with any evidence that purports to show infringement of this claim by any TrafficPro device.

27. The automobile navigation system of claim 1 wherein said route finder is adapted to find a best route according to any one of three cost metrics: distance, speed, simplicity.	This claim is not infringed because claim 1 is not infringed for the reasons stated above. In addition, the Harley-Davidson device cannot find a best route according to simplicity. Avoidance of certain streets should not be construed to be synonymous with simplicity.
28. The automobile navigation system of claim 1 wherein said route finder is adapted to calculate a new route if the driver or vehicle navigation system makes an error or if the route is unnavigable due to unforeseen circumstances, wherein said new route does not simply backtrack to the point of the error if a better route from the current location exists.	This claim is not infringed because claim 1 is not infringed for the reasons stated above. In addition, the Harley-Davidson device does not take into consideration any reason why a route must be recalculated and is indifferent as to why it must be done. The route finder does not differentiate between having to recalculate due to errors (either by the user or the system) or unnavigability due to circumstances (unforeseen or otherwise).
29. The automobile navigation system of claim 1 wherein said route finder is adapted to calculate a new route while the automobile is in motion, wherein said new route will begin from the location of the automobile at the time the calculation of the new route is completed.	MIT has not come forward with any evidence that purports to show infringement of this claim by any Harley-Davidson device.
32. The automobile navigation system of claim 1 wherein said location system is a position-keeping (dead-reckoning) system.	MIT has not come forward with any evidence that purports to show infringement of this claim by any Harley-Davidson device.
34. The automobile navigation system of claim 1 wherein said location system employs map matching.	MIT has not come forward with any evidence that purports to show infringement of this claim by any Harley-Davidson device.
35. The automobile navigation system of claim 1 wherein said position sensing apparatus comprises displacement and direction sensors installed in the automobile.	This claim is not infringed because claim 1 is not infringed for the reasons stated above. In addition, as sold by Harman, none of the Harley-Davidson devices include displacement sensors. Also, none of the Harley-Davidson device systems included anything installed in the vehicle that can sense direction.
36. The automobile navigation system of claim 1 wherein said position sensing apparatus measures displacement with an odometer.	MIT has not come forward with any evidence that purports to show infringement of this claim by any Harley-Davidson device.
40. The automobile navigation system of claim 1 wherein said position sensing apparatus measures direction with a gyroscope.	This claim is not infringed because claim 1 is not infringed for the reasons stated above. In addition, measuring the vehicle rate of change of the steering angle should not be construed to be the same as measuring direction.
41. The automobile navigation system of claim 1 wherein said discourse generator is based on an object-oriented programming methodology.	MIT has not come forward with any evidence that purports to show infringement of this claim by any Harley-Davidson device.
42. The automobile navigation system of claim 1 wherein each intersection in a route is classified into one type in a taxonomy of intersection types, and the disclosure generated in relation to each said intersection depends on its type.	MIT has not come forward with any evidence that purports to show infringement of this claim by any Harley-Davidson device.
43. The automobile navigation system of claim 42 wherein said taxonomy of intersection types includes continue, forced-turn, U-turn, enter, exit, onto-rotary, stay-on-rotary, exit-rotary, fork, turn, and stop.	MIT has not come forward with any evidence that purports to show infringement of this claim by any Harley-Davidson device.

44. The automobile navigation system of claim 42 wherein said discourse generated further depends on a description function for each intersection type which generates a description given the length and tense of the desired description and the position along the route from which an instruction is to be given.	<b>MIT has not come forward with any evidence that purports to show infringement of this claim by any Harley-Davidson device.</b>
45. The automobile navigation system of claim 1 wherein said discourse generated comprises a long description of an act given substantially before the act is to be performed and a short description given at the time the act is to be performed.	This claim is not infringed because claim 1 is not infringed for the reasons stated above.  In addition, the evidence cited in MIT's claim chart provides no basis to conclude that any instruction/short description is given at the time the act is to be performed. To the contrary, it establishes that a visual display (the bargraph) indicates when to perform the act, not a verbal description.
46. The automobile navigation system of claim 45 wherein said long descriptions includes cues.	<b>MIT has not come forward with any evidence that purports to show infringement of this claim by any Harley-Davidson device.</b>
48. The automobile navigation system of claim 1 wherein said driver input means includes means for said driver to demand immediate instructions, or clarification or repetition of instructions already provided.	This claim is not infringed because claim 1 is not infringed for the reasons stated above.  In addition, the Harley-Davidson device does not include any means to demand clarification of instructions, and does not include a true "repeat" function, contrary to the statements in the user manual.
49. The automobile navigation system of claim 1 wherein said driver input means includes means for said driver to indicate to said automobile navigation system that a given instruction provided by said system is impossible to complete for some reason and that a new route must be calculated.	This claim is not infringed because claim 1 is not infringed for the reasons stated above.  In addition, the Harley-Davidson device does not include any way for a user to indicate that a given instruction provided by said system is impossible to complete for some reason. At most, the Harman systems simply include a way to request a new route calculation, without providing any such explanation or reason for the requirement.
54. The automobile navigation system of claim 1 wherein said discourse generator is responsive to a user-model stored in said computing apparatus to customize discourse to the requirements and preferences of said driver.	This claim is not infringed because claim 1 is not infringed for the reasons stated above.  In addition, the option to choose between a particular language or units that is not stored as a user-model, and/or which does not affect or customize in any way the discourse should not be construed to be within the scope of this claim.
56. The automobile navigation system of claim 1 wherein said speech generator uses digitized speech.	MIT's infringement claim chart, which addresses only other products (including non-U.S. products) with respect to this claim, sets forth no evidence relating to the issue of whether this claim is met by the Harley-Davidson device.  In addition, this claim is not infringed because claim 1 is not infringed for the reasons stated above.

685 Patent	Non-Infringement of the NTG4 Device <sup>1</sup>
1. An automobile navigation system which produces spoken instructions to direct a driver of an automobile to a destination in real time comprising:	The citation in MITT's claim chart to page 184 of Mr. Radomski's deposition transcript, where Mr. Radomski is not talking about HAR 026022 or the NR2 system, provides no support for a finding that this preamble is met by the NTG4 system.
	The citation in MITT's claim chart to page 231 of Mr. Radomski's deposition transcript, where Mr. Radomski is not talking about spoken directions, provides no support for a finding that this preamble is met by the NTG4 system.
computing apparatus for running and coordinating system processes,	The citation in MITT's claim chart to the presentation at PX22, which is not a final specification of any NTG4 product, provides no basis to prove that the eventual design of the NTG4 product will meet this limitation.
	The citation in MITT's claim chart to pages 231-32 of Mr. Radomski's deposition transcript, where Mr. Radomski is not talking about any computing apparatus for the NTG4, provides no support for a finding that this limitation is met by the NTG4 system.
driver input means functionally connected to said computing apparatus for entering data into said computing apparatus, said data including a desired destination,	The NTG4 device will not include this limitation. First, no NTG4 will have a keyboard or equivalent structure. Second, the NTG4 will not be allowed for inputting data into the computer that includes a desired destination. Instead, a NTG4 user will select among data that has already been pre-input into the Harman U.S. system.
a map database functionally connected to said computing apparatus which distinguishes between physical and legal connectivity,	As properly construed, the NTG4 database will not "distinguish[]" between physical and legal connectivity."
position sensing apparatus installed in the automobile and functionally connected to said computing apparatus for providing said computing apparatus data for determining the automobile's current position,	GPS satellites are not "installed in the automobile" and GPS receivers are not position sensors. In addition, a gyroscope does not sense position, and no vehicle speed sensors are included in the NTG4 systems that are built and sold by Harman.
a location system functionally connected to said computing apparatus for accepting data from said position sensing apparatus, for consulting said map database, and for determining the automobile's current position relative to the map database,	The NTG4 will not determine any relative map position. Instead, it will be based on absolute map locations. In addition, the NTG4 will not use a map database as claimed for the reason set forth above.
a route-finder functionally connected to said computing apparatus, for accepting the desired destination from said driver input means and the current position from said location system, for consulting said map database, and for computing a route to the destination,	As noted above, the NTG4 will not include the required "driver input means" and "map database" recited in this limitation. In addition, the NTG4 will not compute a route to the destination. Instead, the route finder will take an iterative approach that interpolated a route from both ends - the beginning and end - until a route is chosen, as opposed to calculating a route to the desired destination.

<sup>1</sup> The NTG4 device is a future product that is still under development and for which the design has yet to be finalized. There have been no sales, offers to sell, or importation of the NTG4 device. At most, prototypes for which designed have not been finalized have been made and used by Harman. This chart is based on Harman's current knowledge of the design as it exists today, but that design is potentially subject to change.



a discourse generator functionally connected to said computing apparatus for accepting the current position from said location system and the route from said route finder, for consulting said map database, and for composing discourse including instructions and other messages for directing the driver to the destination from the current position.	The NTG4 will not "compose discourse including instructions and other messages for directing the driver to the destination." First, it is unclear how MIT construes the term "discourse," but to the extent MIT requires something more for "discourse" other than the plain and ordinary meaning of "Verbal expression in speech or writing," then the NTG4 will not meet such requirements. Second, MIT has cited no evidence that any "other information for directing the driver to the destination" will be presented by the NTG4 system.
a speech generator functionally connected to said discourse generator for generating speech from said discourse provided by said discourse generator, and voice apparatus functionally connected to said speech generator for communicating said speech provided by said speech generator to said driver.	MIT has not identified any speech generator in its claim chart with respect to the NTG4, but merely cites to passages that indicate that audio may be outputted by the system.
2. The automobile navigation system of claim 1 wherein said map database comprises a set of straight line segments and a set of nodes, each endpoint of each segment being a pointer to a node representing the coordinates of the endpoint and the set of other segments which are physically and legally connected to that endpoint.	As sold by Harman, the NTG4 system did not include any voice apparatus/speakers. The NTG4 could be completely operational without being connected to speakers, and Harman has no knowledge as to which users may or may not connect a NTG4 system to other third-party speaker systems.
7. The automobile navigation system of claim 1 wherein said map database comprises a three-dimensional representation of street topology.	This claim is not infringed because claim 1 is not infringed for the reasons stated above. In addition, nothing in MIT's infringement chart indicates the particular database arrangement is present in any NTG4 device.
8. The automobile navigation system of claim 1 wherein said map database includes measures of street quality.	This claim is not infringed because claim 1 is not infringed for the reasons stated above. In addition, the NTG4 map does not include three-dimensional representation of street topology. The third number included for some particular locations is only used to represent which roads are above others by use of a relative indicator (-1, 0, 1 or 2, for example), but this is not a third coordinate, and is not a three-dimensional representation of street topology.
9. The automobile navigation system of claim 1 wherein said map database distinguishes divided streets.	This claim is not infringed because claim 1 is not infringed for the reasons stated above.
11. The automobile navigation system of claim 1 wherein said map database includes lane information.	This claim is not infringed because claim 1 is not infringed for the reasons stated above.
12. The automobile navigation system of claim 1 wherein said map database includes speed limits.	This claim is not infringed because claim 1 is not infringed for the reasons stated above. In addition, the NTG4 database that will be used in the U.S. does not include speed limits.
13. The automobile navigation system of claim 1 wherein said map database includes expected rate of travel.	MIT has not come forward with any evidence that purports to show infringement of this claim by any NTG4 device.
19. The automobile navigation system of claim 1 wherein said map database includes a database of service locations.	MIT has not come forward with any evidence that purports to show infringement of this claim by any NTG4 device.
21. The automobile navigation system of claim 1 further comprising means for updating said map database.	MIT has not come forward with any evidence that purports to show infringement of this claim by any NTG4 device.

23. The automobile navigation system of claim 1 wherein the map has minimum accuracy of 10 meters.	MIT has not come forward with any evidence that purports to show infringement of this claim by any NTG4 device.
24. The automobile navigation system of claim 1 wherein said route finder is based on a best-first search algorithm.	MIT has not come forward with any evidence that purports to show infringement of this claim by any TrafficPro device.
27. The automobile navigation system of claim 1 wherein said route finder is adapted to find a best route according to any one of three cost metrics: distance, speed, simplicity.	MIT has not come forward with any evidence that purports to show infringement of this claim by any NTG4 device.
28. The automobile navigation system of claim 1 wherein said route finder is adapted to calculate a new route if the driver or vehicle navigation system makes an error or if the route is unnavigable due to unforeseen circumstances, wherein said new route does not simply backtrack to the point of the error if a better route from the current location exists.	MIT has not come forward with any evidence that purports to show infringement of this claim by any NTG4 device.
29. The automobile navigation system of claim 1 wherein said route finder is adapted to calculate a new route while the automobile is in motion, wherein said new route will begin from the location of the automobile at the time the calculation of the new route is completed.	MIT has not come forward with any evidence that purports to show infringement of this claim by any NTG4 device.
32. The automobile navigation system of claim 1 wherein said location system is a position-keeping (dead-reckoning) system.	MIT has not come forward with any evidence that purports to show infringement of this claim by any NTG4 device.
34. The automobile navigation system of claim 1 wherein said location system employs map matching.	MIT has not come forward with any evidence that purports to show infringement of this claim by any NTG4 device.
35. The automobile navigation system of claim 1 wherein said position sensing apparatus comprises displacement and direction sensors installed in the automobile.	This claim is not infringed because claim 1 is not infringed for the reasons stated above. In addition, as sold by Harman, none of the NTG4 systems will include displacement or direction sensors.
36. The automobile navigation system of claim 1 wherein said position sensing apparatus measures displacement with an odometer.	MIT has not come forward with any evidence that purports to show infringement of this claim by any NTG4 device.
40. The automobile navigation system of claim 1 wherein said position sensing apparatus measures direction with a gyroscope.	The citation in MIT's claim chart to page 184 of Mr. Radomski's deposition transcript provides no support for a finding that this limitation is met by the NTG4 system. The citation to HAR 026022 similarly provides no support for a finding that this preamble is met by the NTG4 system.
41. The automobile navigation system of claim 1 wherein said discourse generator is based on an object-oriented programming methodology.	MIT has not come forward with any evidence that purports to show infringement of this claim by any NTG4 device.
42. The automobile navigation system of claim 1 wherein each intersection in a route is classified into one type in a taxonomy of intersection types, and the disclosure generated in relation to each said intersection depends on its type.	MIT has not come forward with any evidence that purports to show infringement of this claim by any NTG4 device.

43. The automobile navigation system of claim 42 wherein said taxonomy of intersection types includes continue, forced-turn, U-turn, enter, exit, onto-rotary, stay-on-rotary, exit-rotary, fork, turn, and stop.	MIT has not come forward with any evidence that purports to show infringement of this claim by any NTG4 device.
44. The automobile navigation system of claim 42 wherein said discourse generated further depends on a description function for each intersection type which generates a description given the length and tense of the desired description and the position along the route from which an instruction is to be given.	MIT has not come forward with any evidence that purports to show infringement of this claim by any NTG4 device.
45. The automobile navigation system of claim 1 wherein said discourse generated comprises a long description of an act given substantially before the act is to be performed and a short description given at the time the act is to be performed.	MIT has not come forward with any evidence that purports to show infringement of this claim by any NTG4 device.
46. The automobile navigation system of claim 45 wherein said long descriptions includes cues.	MIT has not come forward with any evidence that purports to show infringement of this claim by any NTG4 device.
48. The automobile navigation system of claim 1 wherein said driver input means includes means for said driver to demand immediate instructions, or clarification or repetition of instructions already provided.	MIT has not come forward with any evidence that purports to show infringement of this claim by any NTG4 device.
49. The automobile navigation system of claim 1 wherein said driver input means includes means for said driver to indicate to said automobile navigation system that a given instruction provided by said system is impossible to complete for some reason and that a new route must be calculated.	MIT has not come forward with any evidence that purports to show infringement of this claim by any NTG4 device.
54. The automobile navigation system of claim 1 wherein said discourse generator is responsive to a user-model stored in said computing apparatus to customize discourse to the requirements and preferences of said driver.	MIT has not come forward with any evidence that purports to show infringement of this claim by any NTG4 device.
56. The automobile navigation system of claim 1 wherein said speech generator uses digitized speech.	MIT has not come forward with any evidence that purports to show infringement of this claim by any NTG4 device.

# **EXHIBIT J**

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**H**

Briefs and Other Related Documents

02 Micro Intern. Ltd. v. Monolithic Power Systems,  
 Inc.C.A.Fed. (Cal.),2006.Only the Westlaw citation  
 is currently available.

United States Court of Appeals,Federal Circuit.

02 MICRO INTERNATIONAL LIMITED,  
 Plaintiff/Counterclaim Defendant-Appellant,  
 and02 Micro, Inc., Counterclaim  
 Defendant-Appellant,

v.

MONOLITHIC POWER SYSTEMS, INC.,  
 Defendant/Counterclaimant-Appellee.

No. 06-1064.

Nov. 15, 2006.

**Background:** Suit was brought alleging  
 infringement of patent disclosing a circuit for  
 converting the direct current supplied by laptop  
 batteries into the alternating current required for the  
 cold cathode fluorescent lamps that provide the  
 lighting for computer monitors. The United States  
 District Court for the Northern District of  
 California, Claudia Wilken, J., granted summary  
 judgment of non-infringement in favor of defendant,  
 and plaintiff appealed.

**Holdings:** The Court of Appeals, Dyk, Circuit  
 Judge, held that:

(1) issues concerning the validity and interpretation  
 of local patent rules were governed by the law of  
 regional circuit, rather than Federal Circuit;

(2) local patent rules validly prohibited amendments  
 to infringement and invalidity contentions based on  
 new information developed in discovery without  
 showing of diligence; and

(3) court did not abuse its discretion in finding a  
 lack of diligence and therefore a lack of "good cause  
 " warranting amendment of movant's infringement

contentions.

Affirmed.

**[1] Courts 106 ¶96(7)**

106 Courts

106II Establishment, Organization, and  
 Procedure

106II(G) Rules of Decision

106k88 Previous Decisions as Controlling  
 or as Precedents

106k96 Decisions of United States  
 Courts as Authority in Other United States Courts

106k96(7) k. Particular Questions  
 or Subject Matter. Most Cited Cases

Issues concerning the validity and interpretation of  
 local patent rules, which were intimately involved in  
 the substance of enforcement of the patent right,  
 were governed by the law of regional circuit, rather  
 than Federal Circuit; local rules were not only  
 unique to patent cases but also were likely to  
 directly affect the substantive patent law theories  
 that could be presented at trial. U.S. Dist. Ct. N.D.  
 Cal. Patent L.R. 3-1-3-7.

**[2] Courts 106 ¶96(7)**

106 Courts

106II Establishment, Organization, and  
 Procedure

106II(G) Rules of Decision

106k88 Previous Decisions as Controlling  
 or as Precedents

106k96 Decisions of United States  
 Courts as Authority in Other United States Courts

106k96(7) k. Particular Questions  
 or Subject Matter. Most Cited Cases

A procedural issue that is not itself a substantive  
 patent law issue is nonetheless governed by Federal  
 Circuit law if the issue pertains to patent law, if it  
 bears an essential relationship to matters committed

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to court's exclusive control by statute, or if it clearly implicates the jurisprudential responsibilities of court in a field within its exclusive jurisdiction.

### [3] Federal Civil Procedure 170A ⚡25

#### 170A Federal Civil Procedure

##### 170AI In General

##### 170AI(B) Rules of Court in General

##### 170AI(B)1 In General

##### 170Ak25 k. Local Rules of District Courts. Most Cited Cases

To be valid, local rules must be consistent with both acts of Congress and the Federal Rules of Civil Procedure. 28 U.S.C.A. § 2071(a); Fed.Rules Civ.Proc.Rule 83(a)(1), 28 U.S.C.A.

### [4] Federal Civil Procedure 170A ⚡25

#### 170A Federal Civil Procedure

##### 170AI In General

##### 170AI(B) Rules of Court in General

##### 170AI(B)1 In General

##### 170Ak25 k. Local Rules of District Courts. Most Cited Cases

A local rule need not be directly contradictory to a federal rule to be invalid; a local rule that is inconsistent with the purposes of a federal rule is also invalid. 28 U.S.C.A. § 2071(a); Fed.Rules Civ.Proc.Rule 83(a)(1), 28 U.S.C.A.

### [5] Patents 291 ⚡310.11

#### 291 Patents

##### 291XII Infringement

##### 291XII(C) Suits in Equity

##### 291k309 Pleading

##### 291k310.11 k. Amended and Supplemental Pleadings. Most Cited Cases

Local patent rules validly prohibited amendments to infringement and invalidity contentions based on new information developed in discovery without showing of diligence; good cause standard alone did not warrant amendment without regard to diligence of the party seeking to amend. U.S. Dist. Ct. N.D. Cal. Patent L.R. 3-6, 3-7.

### [6] Patents 291 ⚡310.11

#### 291 Patents

##### 291XII Infringement

##### 291XII(C) Suits in Equity

##### 291k309 Pleading

##### 291k310.11 k. Amended and

##### Supplemental Pleadings. Most Cited Cases

Under California's local patent rules, burden is on the movant to establish diligence warranting amendments to infringement and invalidity contentions. U.S. Dist. Ct. N.D. Cal. Patent L.R. 3-6, 3-7.

### [7] Patents 291 ⚡324.5

#### 291 Patents

##### 291XII Infringement

##### 291XII(C) Suits in Equity

##### 291k324 Appeal

##### 291k324.5 k. Scope and Extent of

##### Review in General. Most Cited Cases

Decisions enforcing local rules in patent cases will be affirmed unless clearly unreasonable, arbitrary, or fanciful, based on erroneous conclusions of law, clearly erroneous, or unsupported by any evidence.

### [8] Patents 291 ⚡310.11

#### 291 Patents

##### 291XII Infringement

##### 291XII(C) Suits in Equity

##### 291k309 Pleading

##### 291k310.11 k. Amended and

##### Supplemental Pleadings. Most Cited Cases

District court did not abuse its discretion in finding a lack of diligence and therefore a lack of "good cause" warranting amendment of movant's infringement contentions under local patent rules, given the three-month delay between new information learned during discovery and motion to amend and the lack of adequate explanation for that delay. U.S. Dist. Ct. N.D. Cal. Patent L.R. 3-6, 3-7.

### [9] Patents 291 ⚡292.4

#### 291 Patents

##### 291XII Infringement

##### 291XII(C) Suits in Equity

##### 291k292 Discovery

##### 291k292.4 k. Other Matters. Most



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**Cited Cases**

In patent infringement action, court did not abuse its discretion in excluding untimely supplemental expert evidence not disclosed in original expert report. Fed.Rules Civ.Proc.Rules 26(a)(2), 37(c)(1), 28 U.S.C.A.

**[10] Patents 291 ⇌ 292.4****291 Patents****291XII Infringement****291XII(C) Suits in Equity****291k292 Discovery****291k292.4 k. Other Matters. Most****Cited Cases**

Exclusion of evidence was appropriate sanction for failure to comply with the disclosure deadlines required by local patent rules and the case management order. Fed.Rules Civ.Proc.Rule 37(c)(1), 28 U.S.C.A.

**Patents 291 ⇌ 328(2)****291 Patents****291XIII Decisions on the Validity, Construction, and Infringement of Particular Patents****291k328 Patents Enumerated****291k328(2) k. Original Utility. Most Cited****Cases****Patents 291 ⇌ 328(2)****291 Patents****291XIII Decisions on the Validity, Construction, and Infringement of Particular Patents****291k328 Patents Enumerated****291k328(2) k. Original Utility. Most Cited****Cases**

6,259,615. Not Infringed.

6,316,881. Cited.

Appealed from United States District Court for the Northern District of California, Judge Claudia Wilken.

Richard L. Stanley Howrey, LLP, of Houston, Texas, argued for plaintiff/counterclaim

defendant-appellant and counterclaim defendant-appellant. With him on the brief were Korula T. Cherian and Duane H. Mathiowetz, of San Francisco, California. Of counsel on the brief were Joseph Lin, O2 Micro, Inc., of Santa Clara, California; Charlene M. Morrow, Fenwick & West, LLP, of Mountain View, California; and Michael J. Sacksteder and Heather N. Mewes, Fenwick & West, LLP, of San Francisco, California. Of counsel was C .J. Alice Chen, Fenwick & West, LLP, of Mountain View, California.

Dan L. Bagatell, Perkins Coie Brown & Bain P.A., of Phoenix, Arizona, argued for defendant/counterclaimant-appellee. With him on the brief were James A. DiBoise and Michael Barclay, Wilson Sonsini Goodrich & Rosati, of Palo Alto, California.

Before MICHEL, Chief Judge, DYK and PROST, Circuit Judges.

DYK, Circuit Judge.

\*1 Appellants O2 Micro International Limited and O2 Micro, Inc. (collectively "O2 Micro") appeal the district court's grant of summary judgment of non-infringement in favor of appellee Monolithic Power Systems, Inc. ("MPS"). Specifically, O2 Micro contends that the district court erred in denying it leave to amend its infringement contentions and refusing to allow supplementation of its expert report. Because we find no error in the district court's denial of leave to amend the infringement contentions, refusal to allow amendment of the expert report, or grant of summary judgment, we affirm.

**BACKGROUND****I**

O2 Micro is the holder of U.S. Patent No. 6,259,615 ("615 patent"), which discloses a circuit for converting direct current ("DC") to alternating current ("AC"). The principal use of the circuit is to convert the direct current supplied by laptop batteries into the alternating current required for the cold cathode fluorescent lamps ("CCFLs") that provide the lighting for computer monitors. By

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using feedback signals and pulse signals, the circuit controls two pairs of switches so as to regulate the amount of power delivered to the lamp.

Claim 1 of the 615 patent discloses, in relevant part, "a feedback control loop circuit receiving a feedback signal indicative of power being supplied to said [lamp], and adapted to generate a second signal [sic] pulse signal for controlling the conduction state of said second plurality of switches *only if said feedback signal is above a predetermined threshold.*" col.10, l.67-col.11, l.5 (emphasis added).<sup>FN1</sup> The latter claim limitation requires that the second set of switches be controlled only if the feedback signal is above a certain threshold. Claim 18 of the 615 patent discloses a nearly identical limitation; <sup>FN2</sup> the parties refer to the relevant limitations in claims 1 and 18 collectively as the "only if" limitation.

## II

02 Micro filed suit in the U.S. District Court for the Northern District of California on October 24, 2001, alleging infringement by MPS of claims 1 and 18 of the 615 patent. MPS counterclaimed for a declaratory judgment that the 615 patent was invalid, unenforceable, or not infringed; it also counterclaimed that 02 Micro infringed MPS's U.S. Patent No. 6,316,881 ( '881 patent)). (The '881 patent is no longer at issue in the appeal.) Although the complaint did not set forth a specific theory of infringement of the 615 patent, 02 Micro relied on three theories in the course of the proceedings before the district court to explain how the "only if" limitation was satisfied by the accused device. As the district court noted, "[i]n order to determine whether a device infringes the 'only if' limitation, one must compare the feedback signal to the threshold in the allegedly infringing devices." *02 Micro Int'l Ltd. v. Monolithic Power Sys., Inc.*, Nos. C 00-4071 CW, C 01-3995 CW, slip. op. at 8 (N.D.Cal. Feb. 11, 2004).

\*2 Under 02 Micro's "Isense" theory, a feedback control loop in the accused device runs between the lamp and Isense pin. The Isense pin measures the current supplied to the lamp in terms of voltage.

According to this theory, the "only if" limitation is satisfied because the second set of switches is not controlled unless the voltage measurement at the Isense pin is greater than a predetermined threshold determined by another pin, called the Bright pin.

In 02 Micro's "open lamp" theory, the feedback control loop runs between the lamp and the open lamp pin, which is designed to recognize a fault at the lamp ("open lamp condition"), such as an unattached or burnt out lamp. An open lamp condition causes the voltage at the open lamp pin to fall below a certain level, normally 1.2V, which causes all of the switches to stop. The "only if" limitation is met under this theory because the second set of switches (like all switches) is only controlled when the open lamp pin value is above the threshold of an open lamp condition (i.e., normally 1.2V).

Finally, 02 Micro's "Vsense" theory identifies the same feedback control loop as the Isense theory. During normal operations, the voltage value at the Isense pin is greater than either 92mV (standard operation), 83mV (minimum operation), or 101 mV (maximum operation). According to this theory, the second set of switches (like all switches) is only controlled during normal operations, which means that the value at the Isense pin must be above the threshold for normal operations, thus satisfying the "only if" limitation.

On May 31, 2002, the court entered a scheduling order setting the case management schedule.<sup>FN3</sup> It established a period for discovery with fact discovery ending on November 4, 2002, and expert discovery ending on December 11, 2002. The scheduling order also noted the prior April 19 submission of preliminary infringement contentions and set a June 7 deadline for preliminary invalidity contentions. Finally, the court set a trial date of May 5, 2003. This order was revised on October 7, 2002. In the revised order, the court established deadlines dependent on the service of its claim construction ruling. Final infringement contentions were to be exchanged 20 days after service of the claim construction ruling. Final invalidity contentions were due 20 days later. Under this revised schedule, fact discovery was to be completed by April 21,



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2003, and expert discovery by June 3. On April 21, at the joint request of the parties, the court extended fact discovery until May 9 and expert discovery until June 30.

The Northern District of California has adopted local rules that require parties to state early in the litigation and with specificity their contentions with respect to infringement and invalidity.<sup>FN4</sup> The ability of parties to amend those contentions is restricted. Apart from amendments designed to take account of the district court's claim construction, amendments are permitted only for "good cause" even though the period allowed for discovery typically will not have expired.

\*3 02 Micro filed preliminary infringement contentions as to the 615 patent on April 19, 2002, as required by the local rules, and relied exclusively on the Isense theory. MPS' preliminary invalidity contentions as to the 615 patent were then served on June 7, 2002. The district court held a claim construction hearing on October 4, 2002, and issued its ruling on December 27, 2002. Under Patent Local Rule 3-6(a),<sup>FN5</sup> 02 Micro had 30 days after this claim construction ruling to amend its infringement contentions without leave of the court. On January 16, 2003, 02 Micro served its final infringement contentions, still relying solely on the Isense theory. Final invalidity contentions were submitted by MPS twenty days later. Discovery was on-going during this time period, and 02 Micro deposed James C. Moyer, MPS's chief integrated circuit engineer, on February 24-25, 2003. 02 Micro contends that it was only after Dr. Moyer explained the operation of the open lamp pin that it was able to develop the open lamp theory, though 02 Micro did have documents identifying the open lamp pin as early as March 2002.

On March 17, 2003, 02 Micro requested that MPS stipulate to amendment of 02 Micro's invalidity contentions relating to the two MPS patents that are not in issue in this appeal. MPS responded on March 20, 2003, by suggesting reciprocal stipulations allowing amendments of both infringement and invalidity contentions for all patents in the case at the close of discovery. On April 7, 2003, 02 Micro indicated its willingness to

enter such an agreement, provided that the amendments did not involve new statutory bases for invalidity or new prior art references.<sup>FN6</sup> In an April 11 letter MPS responded that it "[could] not agree" to this proposal because "[t]he changes to the stipulation proposed by 02 defeats [sic] the purpose of the amendment," though MPS did indicate its willingness to continue negotiations. J.A. at 961. 02 Micro responded on April 15 with substantially the same proposal that it made on April 7, and no further negotiations took place. As the May 9, 2003, discovery deadline approached, 02 Micro counsel telephoned MPS counsel to schedule a date to exchange amended contentions. MPS responded by letter on May 14, stating that it had no plans to amend either its infringement or invalidity contentions and therefore would not stipulate to amendments; MPS did, however, agree to allow amendment of 02 Micro's invalidity contentions with respect to MPS' patents.

Undeterred, 02 Micro sent proposed supplemental infringement contentions concerning the 615 patent, which included the open lamp theory, to MPS on May 23, 2003. MPS responded that same day objecting to 02 Micro's "entirely new infringement theories" and stating that amendment of 02 Micro's contentions "would greatly prejudice MPS." J.A. at 1164. As required by the case management schedule, on May 27, 02 Micro served its opening expert report on infringement, which addressed only the open lamp theory. After MPS rejected its renewed request for a stipulation, 02 Micro moved to amend its infringement contentions on June 6, over three months after the Moyer deposition that had provided the basis for the open lamp theory. Under Patent Local Rule 3-7, amendment of final infringement contentions required leave of the court and a showing of "good cause." <sup>FN7</sup> 02 Micro claimed "good cause" because the open lamp theory had been developed, based on new evidence disclosed in discovery, after it served its infringement contentions. 02 Micro also asserted "good cause" because MPS originally suggested that it would stipulate to amendments to the contentions but had eventually refused to agree to a stipulation. 02 Micro's motion was supported by three affidavits from its counsel that described the stipulation negotiations and claimed that the open lamp theory

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could not have been developed without discovery, including the February 24-25 Moyer deposition. One of the affidavits also stated that 02 Micro's attorneys had been busy with other business related to the case between the time MPS rejected the proposed stipulation and the service of 02 Micro's proposed amended infringement contentions.

\*4 On July 2 the magistrate judge denied 02 Micro's motion to amend the infringement contentions, finding that 02 Micro's almost three month delay between the Moyer deposition and the service of its proposed amended contentions constituted a lack of diligence. She also held that the existence of negotiations over the proposed stipulation did not justify the delay in amending the contentions because no enforceable agreement was reached, and any such agreement would not be binding on the court in any event. Finally, the magistrate judge found that MPS would be prejudiced by the delay because it would be unable to address the amended contentions in its expert report and would need additional discovery. 02 Micro filed an objection to the magistrate judge's order with the district court judge.

In an attempt to address the prejudice concerns, 02 Micro moved on July 7 to amend the case management schedule to allow MPS to submit a supplemental expert report addressing the open lamp theory. On July 25 02 Micro moved again to amend the case management schedule, seeking new deadlines that would allow for supplementation of expert reports to address the Isense theory and additional expert discovery concerning the supplemental reports.

On the same day, MPS moved for summary judgment of non-infringement. On August 5, 2003, the district court overruled 02 Micro's objection to the magistrate judge's order refusing to allow amendments to the infringement contentions and denied 02 Micro's two pending motions to extend the case management schedule.

02 Micro responded to the summary judgment motion on August 8, relying for the first time on the Vsense theory and including declarations describing this theory from its expert, Robert Erickson, and the

inventor of the 615 patent, Yung-Lin Lin. Those declarations also opined that the Vsense and Isense theories were identical. The district court held that these untimely expert reports should not be considered because 02 Micro had only pointed to the alleged stipulation agreement as excusing the untimeliness, and that argument had already been rejected in the context of the untimely infringement contentions. It further concluded that, even considering this supplemental expert testimony, 02 Micro had not provided any evidence of infringement. Although the court acknowledged that Drs. Erickson and Lin had stated that the Vsense and Isense theories were identical, it concluded that the two theories "express different ideas" because "[o]ne makes the 'only if' comparison in units of current, and the other in units of voltage." *02 Micro Int'l Ltd. v. Monolithic Power Sys., Inc.*, Nos. C 00-4071 CW, C 01-3995 CW, slip. op. at 10 (N.D.Cal. Feb. 11, 2004). Having limited the infringement contentions to the Isense theory and finding no evidence in the record supporting this theory, the court granted summary judgment of non-infringement on February 11, 2004.

In denying 02 Micro's motion for reconsideration on September 15, 2004, the magistrate judge clarified that the original ruling rested on the fact that the plaintiff "unreasonably delayed" in moving to amend its infringement contentions. With the parties' consent, the court then entered an order of final judgment of non-infringement pursuant to Federal Rule of Civil Procedure 54(b). The district court also dismissed MPS's counterclaim for a declaratory judgment of invalidity of the 615 patent without prejudice. 02 Micro timely appealed. We have jurisdiction pursuant to 28 U.S.C. § 1295(a)(1) (2000).

## DISCUSSION

\*5 This case primarily presents questions concerning the interpretation and application of the Northern District of California's local rules for patent cases. As noted, a party claiming patent infringement in the Northern District must serve preliminary infringement contentions within ten days of the initial case management conference. *See*

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U.S. Dist. Ct. N.D. Cal. Patent L.R. 3-1. Among other things, these contentions must specify each claim of each patent that is allegedly infringed, each product that allegedly infringes, and the location in the product where each element of each asserted claim is found. *See id.* The preliminary contentions generally become the final contentions thirty days after the claim construction ruling unless a party serves final infringement contentions. A party may submit final infringement contentions that differ from the preliminary contentions without leave of the court within the thirty day period after the claim construction ruling only if the amending party believes in good faith that the claim construction ruling or the documents submitted with the other party's invalidity contentions require a change. *See* U.S. Dist. Ct. N.D. Cal. Patent L.R. 3-6. Outside of this thirty day period, amendments or modification to the contentions can only be made "by order of the Court ... upon a showing of good cause." *See* U.S. Dist. Ct. N.D. Cal. Patent L.R. 3-7. The district judges in the Northern District of California, including the district judge in this case, have understood the good cause requirement in the local patent rules to require a showing that the party seeking leave to amend acted with diligence in promptly moving to amend when new evidence is revealed in discovery. *See* J.A. at 46 (noting that the plaintiff unreasonably delayed in moving to amend); *see also, e.g., ZiLOG, Inc. v. Quicklogic Corp.*, No. C03-03725 JW, 2006 WL 563057, at \*1 (N.D.Cal. March 6, 2006) ("This constitutes sufficient diligence to meet the 'good cause' standard.").

The local patent rules do not specify the actions that the district court may or must take if there is non-compliance with the requirements for disclosure of contentions. However, the rules are essentially a series of case management orders,<sup>FN8</sup> and the deadlines for submission of contentions in this case were explicitly included in a supplemental case management order. The court may impose any "just" sanction for the failure to obey a scheduling order, including "refusing to allow the disobedient party to support or oppose designated claims or defenses, or prohibiting that party from introducing designated matters in evidence." Fed.R.Civ.P. 16(f); Fed.R.Civ.P. 37(b)(2)(B). District judges in the

Northern District of California have taken various positions depending on the facts of the particular case as to whether non-compliance with the rules for disclosure of contentions should bar reliance on theories omitted from the preliminary or final contentions.<sup>FN9</sup>

# I

\*6 [1] 02 Micro appears to contend that, while diligence is the correct standard, the local patent rules are invalid unless they are construed to require a finding of "good cause" whenever a party seeks to amend contentions based on new material revealed in discovery so long as the motion to amend is filed within a "reasonable time" after the close of discovery. As an initial matter, we must decide whether Federal Circuit or Ninth Circuit law governs the validity and interpretation of the Northern District of California's local patent rules.

[2] "[A] procedural issue that is not itself a substantive patent law issue is nonetheless governed by Federal Circuit law if the issue pertains to patent law, if it bears an essential relationship to matters committed to our exclusive control by statute, or if it clearly implicates the jurisprudential responsibilities of this court in a field within its exclusive jurisdiction." *Midwest Indus., Inc. v. Karavan Trailers, Inc.*, 175 F.3d 1356, 1359 (Fed.Cir.1999) (en banc in relevant part) (internal citations and quotation marks omitted). More recently, we have explained that in matters of procedure we "will apply the law of the regional circuit to which district court appeals normally lie, unless the issue pertains to or is unique to patent law." *Sulzer Textil A.G. v. Picanol N.V.*, 358 F.3d 1356, 1363 (Fed.Cir.2004) (internal quotation marks omitted). However, "we will apply our own law to both substantive and procedural issues intimately involved in the substance of enforcement of the patent right." *Id.* (internal quotation marks omitted).

There is an important distinction between local rules of general applicability, which by definition are not unique to patent law and where we apply regional circuit law,<sup>FN10</sup> and local rules that only

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apply to patent cases. However, we need not decide in this case whether Federal Circuit law governs the validity and interpretation of all procedural rules unique to patent cases. The issue here is somewhat narrower for the local rules in question are not only unique to patent cases but also are likely to directly affect the substantive patent law theories that may be presented at trial, being designed specifically to “require parties to crystallize their theories of the case early in the litigation” so as to “prevent the ‘shifting sands’ approach to claim construction.” *Atmel Corp. v. Info. Storage Devices, Inc.*, No. C 95-1987 FMS, 1998 WL 775115, at \*2 (N.D.Cal.1998). Under such circumstances we conclude that issues concerning the validity and interpretation of such local rules are “intimately involved in the substance of enforcement of the patent right,” *Sulzer Textil*, 358 F.3d at 1363, and must be governed by the law of this circuit.

This conclusion is supported by our precedent. For example, in *Advanced Cardiovascular Systems, v. Medtronic, Inc.*, 265 F.3d 1294 (Fed.Cir.2001), we reviewed the denial of leave to amend a response chart under the then-existing Northern District of California rules to add a new statutory basis for invalidity. We held that Federal Circuit law applied because “[d]etermining the sufficiency of notice regarding defenses asserted under specific statutory provisions of the patent laws clearly implicates the jurisprudential responsibilities of this court within its exclusive jurisdiction.” *Id.* at 1303; *see also Genentech, Inc. v. Amgen, Inc.*, 289 F.3d 761, 774 (Fed.Cir.2002) (applying Federal Circuit law in upholding the district court’s exclusion of the doctrine of equivalents theory of infringement under local rules requiring the submission of claim charts in patent cases and providing standards for the amendment of the claims). Since the Northern District of California’s local patent rules on amendment of infringement contentions are unique to patent cases and have a close relationship to enforcement of substantive patent law, we proceed to review their validity and interpretation under Federal Circuit law.

\*7 [3][4] Turning to the merits of 02 Micro’s claim, we do not doubt our power in the appropriate circumstance to refuse to enforce a local rule that

unduly limits discovery in patent cases.<sup>FN11</sup> To be valid, local rules must be consistent with both acts of Congress and the Federal Rules of Civil Procedure. *See* 28 U.S.C. § 2071(a) (2000); Fed.R.Civ.P. 83(a)(1). A local rule need not be directly contradictory to a federal rule to be invalid; a local rule that is inconsistent with the purposes of a federal rule is also invalid. *See Whitehouse v. U.S. Dist. Ct. for Dist. of Rhode Island*, 53 F.3d 1349, 1363 (1st Cir.1995). It is foreseeable that a local patent rule could conflict with the spirit, if not the letter, of the broad discovery regime under the Federal Rules of Civil Procedure, especially given the particular importance of discovery in complex patent cases. *See generally* 8 Charles Alan Wright, Arthur R. Miller & Richard L. Marcus, *Federal Practice and Procedure* (“Wright & Miller”) §§ 1202, 2001 (2d ed.1994).

[5] In saying that amendments to contentions must be permitted as a matter of course when new information is revealed in discovery, 02 Micro incorrectly seems to assume that the discovery rules are designed solely to enable a claimant to develop information to support its claim. While a party asserting a claim or counterclaim must have a reasonable basis for filing suit, the Federal Rules require only notice pleading by the claimant. *See Swierkiewicz v. Sorema, N.A.*, 534 U.S. 506, 512-14, 122 S.Ct. 992, 152 L.Ed.2d 1 (2002); *see also* Fed.R.Civ.P. 8. Given the simplified notice pleading system, the discovery allowed by the rules serves two purposes. First, discovery allows the plaintiff to develop facts to support the theory of the complaint and allows the defendant to develop facts to support its defenses. *See Hickman v. Taylor*, 329 U.S. 495, 501, 67 S.Ct. 385, 91 L.Ed. 451 (1947). Second, discovery is designed to allow the defendant to pin down the plaintiff’s theories of liability and to allow the plaintiff to pin down the defendant’s theories of defense, thus confining discovery and trial preparation to information that is pertinent to the theories of the case. *See id.*; Wright & Miller § 2001; *see also* Fed.R.Civ.P. 33, advisory committee’s note to 1970 amendment of subsection (b) (“As to requests [via interrogatories] for opinions or contentions that call for the application of law to fact, they can be most useful in narrowing and sharpening the issues, which is a major purpose



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of discovery.”).

In practice the latter objective-allowing the parties to discover their opponent's theories of liability-has been difficult to achieve through traditional discovery mechanisms such as contention interrogatories. Answers to such interrogatories are often postponed until the close of discovery, *see* Fed.R.Civ.P. 33(c), or are amended as a matter of course during the discovery period, *see* Wright & Miller § 2181 (noting that courts should allow amendments to interrogatories as parties complete their investigations and develop a full understanding of the case). The local patent rules in the Northern District of California are designed to address this problem by requiring both the plaintiff and the defendant in patent cases to provide early notice of their infringement and invalidity contentions, and to proceed with diligence in amending those contentions when new information comes to light in the course of discovery. The rules thus seek to balance the right to develop new information in discovery with the need for certainty as to the legal theories.<sup>FN12</sup>

\*8 02 Micro is certainly correct that refusing to allow any amendment to contentions based on new information developed in discovery could be contrary to the spirit of the Federal Rules. The Federal Rules replaced a system in which the issues had to be conclusively defined at the outset of litigation through the pleadings, with a system that relied on discovery and pretrial hearings to gradually identify the precise issues in dispute as more information became available. *See Hickman*, 329 U.S. at 500; Wright & Miller § 2001; *see also Swierkiewicz*, 534 U.S. at 512 (“This simplified notice pleading standard relies on liberal discovery rules and summary judgment motions to define disputed facts and issues and to dispose of unmeritorious claims.”). If a local patent rule required the final identification of infringement and invalidity contentions to occur at the outset of the case, shortly after the pleadings were filed and well before the end of discovery, it might well conflict with the spirit, if not the letter, of the notice pleading and broad discovery regime created by the Federal Rules. But we see nothing in the Federal Rules that is inconsistent with local rules requiring

~~the early disclosure of infringement and invalidity contentions and requiring amendments to contentions to be filed with diligence. If the parties were not required to amend their contentions promptly after discovering new information, the contentions requirement would be virtually meaningless as a mechanism for shaping the conduct of discovery and trial preparation.~~

Thus, we reject 02 Micro's apparent argument that “good cause” must exist for amending its infringement contentions, without regard to its diligence in doing so, merely because new evidence was revealed during discovery. We agree with the Northern District of California that “good cause” requires a showing of diligence. We note that the Ninth Circuit in a related context has reached the same conclusion. *See Johnson v. Mammoth Recreations, Inc.*, 975 F.2d 604, 609 (9th Cir.1992) (holding that the good cause standard for modification of a case management order under Fed.R.Civ.P. 16(b) “primarily considers the diligence of the party seeking the amendment”); *see also* Fed.R.Civ.P. 16 advisory committee's note to 1983 amendment of section (b) (“[T]he court may modify the schedule on a showing of good cause if it cannot reasonably be met despite the diligence of the party seeking the extension.”).

## II

[6][7] We turn then to 02 Micro's second contention-that the district court abused its discretion in holding that it failed to amend its contentions with diligence in this case. The burden is on the movant to establish diligence rather than on the opposing party to establish a lack of diligence. *See Genentech*, 289 F.3d at 774 (noting that “Genentech does not assert any satisfactory reasons as to why it should be allowed to amend its claim chart”). Decisions enforcing local rules in patent cases will be affirmed unless clearly unreasonable, arbitrary, or fanciful; based on erroneous conclusions of law; clearly erroneous; or unsupported by any evidence. *See Genentech*, 289 F.3d at 774.

\*9 [8] Here, the district court's finding of a lack of

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diligence by 02 Micro was not unreasonable or arbitrary. 02 Micro had reason to know of the open lamp theory as early as March 2002 when it received a data sheet identifying the open lamp pin as part of MPS's initial disclosures. Even accepting 02 Micro's contention that it could not know how the open lamp pin operated until the Moyer deposition in late February 2003 and focusing on the period after this deposition, as the district court did, 02 Micro waited almost three months, until May 23, to serve its proposed amended contentions and two more weeks to formally move to amend.

02 Micro makes three arguments to establish its diligence. First, it claims that the on-going negotiations for a stipulation to joint amendments of infringement and invalidity contentions justified its delay. If there had been an enforceable agreement between the parties, this likely would have satisfied the diligence requirement. Here the letters between the parties reflect offers and counteroffers, but the district court did not err in concluding that they never constituted the "meeting of the minds" required for an enforceable agreement. See Joseph M. Perillo, 1 *Corbin on Contracts* § 4.13 (Rev. ed.1993). It is also possible that reliance on a tentative agreement concerning extensions reached by the parties in negotiations or misleading conduct by the opposing party (leading the moving party to believe that an agreement would be reached) would under some circumstances justify delay. Here, however, there was no tentative agreement, and no misleading conduct. The district court did not err in concluding that the mere existence of good faith negotiations over a possible stipulation was insufficient to excuse 02 Micro's delay.

02 Micro also contends that the delay was justified by the need "to digest and marshal [the] evidence, develop the new theory, and then chronicle the complete theory in contentions and expert reports." Appellants' Br. at 44-45. It is certainly possible that time was required after the Moyer deposition to sufficiently develop the open lamp theory, but 02 Micro failed to establish that it required three months to do so. In support of its motion, 02 Micro merely provided declarations from its counsel stating that the lawyers were busy with discovery during the delay period from February 25 to June 6.

Those affidavits do not explain the relationship between this work and the open lamp theory, nor did 02 Micro offer a declaration from their expert explaining what he was doing during this time to develop the theory or supporting the need for additional time to develop the theory.

Finally, 02 Micro argues that MPS's statement, in opposing leave for 02 Micro to amend its contentions, that "MPS, its engineers, [and] its expert ... will need months" to analyze and respond to the open lamp theory shows that 02 Micro was diligent in waiting three months between first learning the facts necessary to develop the open lamp theory and moving to amend its contentions. Appellants' Br. at 46. However, this statement provides no evidence of diligence by 02 Micro. It does not explain what 02 Micro was actually doing to develop the open lamp theory during the over three-month delay between the Moyer deposition and the June 6 motion to amend.

\*10 Given 02 Micro's delay in moving to amend its infringement contentions and its lack of adequate explanation for this delay, we conclude that the district court did not abuse its discretion in finding a lack of diligence and therefore a lack of "good cause." Having concluded that the district court could properly conclude that 02 Micro did not act diligently in moving to amend its infringement contentions, we see no need to consider the question of prejudice to MPS.

### III

02 Micro also contends that the district court abused its discretion in rejecting its two efforts to supplement its expert report. The parties agree that the denial of leave to supplement the expert report was an evidentiary ruling to which this court should apply the Ninth Circuit's abuse of discretion standard. See *Rhodia Chimie v. PPG Indus., Inc.*, 402 F.3d 1371, 1376 (Fed.Cir.2005); *Columbia Pictures Television, Inc. v. Kyrpton Broad. of Birmingham, Inc.*, 259 F.3d 1186, 1195 (9th Cir.2001).

[9] First, in its July 25 motion, 02 Micro sought

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leave to amend its original expert report to address the Isense theory. We conclude that the district court did not abuse its discretion in denying this motion; 02 Micro has never adequately explained why the Isense theory was not included in the original expert report. In its motion, 02 Micro only argued that it "acted in reliance" on "an agreement to exchange amended infringement contentions at the close of discovery." Just as this alleged (but non-existent) agreement did not excuse the late filing of 02 Micro's amendment to its infringement contentions, that claimed agreement does not support an amendment to the expert report.

In response to the summary judgment motion, 02 Micro again tried to offer supplemental expert evidence, this time in the form of declarations on the Vsense theory from its expert, Dr. Erickson, and the inventor of the 615 patent, Dr. Lin.<sup>FN13</sup> Drs. Erickson and Lin opined that the Vsense theory expressed the same idea as the Isense theory and therefore their declarations supported the Isense infringement contentions. The court refused to consider this evidence, finding that 02 Micro once again argued that there had been an agreement to stipulate to amendments, an argument that had already been rejected in the context of the motion to amend the infringement contentions. Under these circumstances, we see no need to decide whether the district court was correct in concluding that the Vsense and Isense theories were identical.<sup>FN14</sup> Even if they were identical, as 02 Micro contends, 02 Micro failed to show diligence in submitting the expert reports, and the court plainly had the authority to exclude the untimely reports. Federal Rule of Civil Procedure 37(c)(1) authorizes the exclusion of evidence that was not disclosed as required by Federal Rule of Civil Procedure 26(a). Under Rule 26(a)(2), a party must disclose, as directed by the court, its expert witnesses and a report that "contain[s] a complete statement of all opinions to be expressed and the basis and reasons therefor." In this case, the court directed that initial expert reports be submitted by May 27, 2003, and rebuttal reports by June 11. Since the Vsense theory was not disclosed in these expert reports, as required by Fed.R.Civ.P. 26(a)(2), the court did not abuse its discretion in excluding the evidence. See Fed.R.Civ.P. 37(c)(1).

## IV

\*11 02 Micro contends that, even if the district court's rulings taken individually were not erroneous, the combination of the court's denial of its amendment of the infringement contentions to include the open lamp theory and refusal to allow supplementation of the expert reports to include the Isense or Vsense theory was effectively a dismissal. 02 Micro argues that the district court abused its discretion in imposing this sanction, rather than a lesser sanction that would allow resolution of the case on the merits.

[10] Some cases cited by 02 Micro in support of its argument are distinguishable because they involve the exclusion of evidence as a sanction for discovery abuses. See *Heartland Bank v. Heartland Home Fin., Inc.*, 335 F.3d 810 (8th Cir.2003); *United States v. Sumitomo Marine & Fire Ins. Co.*, 617 F.2d 1365 (9th Cir.1980). In this case the court excluded the evidence because of the failure to comply with the disclosure deadlines required by the local patent rules and the case management order. While there may be circumstances in which the exclusion of evidence as a sanction for the failure to comply with a case management order would be an abuse of discretion,<sup>FN15</sup> both the Ninth Circuit and this court have concluded that the exclusion of evidence is often an appropriate sanction for the failure to comply with such deadlines. See *SanDisk Corp. v. Memorex Prods., Inc.*, 415 F.3d 1278, 1292 (Fed.Cir.2005) (finding no abuse of discretion in exclusion of evidence pertaining to theories of claim construction and infringement not disclosed as required by the local patent rules and the court's scheduling order); *Wong v. Regents of Univ. of Cal.*, 410 F.3d 1052, 1060 (9th Cir.2005) ("Parties must understand that they will pay a price for failure to comply strictly with scheduling and other orders, and that failure to do so may properly support severe sanctions and exclusions of evidence."). We see no abuse of discretion in this case, given the significance of the omitted material and 02 Micro's lack of diligence.

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We are left to consider 02 Micro's challenge to the district court's grant of MPS's motion for summary judgment. We review a district court's grant of summary judgment of non-infringement without deference. *Flex-Rest, LLC v. Steelcase, Inc.*, 455 F.3d 1351, 1357 (Fed.Cir.2006). Summary judgment is appropriate only if there is no genuine issue of material fact and the movant is entitled to judgment as a matter of law. *See* Fed.R.Civ.P. 56(c); *Anderson v. Liberty Lobby, Inc.*, 477 U.S. 242, 250, 106 S.Ct. 2505, 91 L.Ed.2d 202 (1986). Since 02 Micro's infringement contentions were limited to the Isense theory and 02 Micro failed to timely provide evidence in support of that theory, the district court did not err in granting summary judgment.

#### CONCLUSION

For the reasons discussed above, the district court did not abuse its discretion in denying 02 Micro's motion to amend its final infringement contentions and rejecting 02 Micro's efforts to supplement its expert report to include evidence on the Isense and Vsense theories. Based on these rulings, the grant of summary judgment was proper.

**\*12 AFFIRMED**

#### COSTS

No costs.

FN1. Claim 1 states in full:

1. A DC/AC converter circuit for controllably delivering power to a load, comprising an input voltage source; a first plurality of overlapping switches and a second plurality of overlapping switches being selectively coupled to said voltage source, said first plurality of switches defining a first conduction path, said second plurality of switches defining a second conduction path; a pulse generator generating a first pulse signal; a transformer having a primary side and a

secondary side, said primary side selectively coupled to said voltage source in an alternating fashion through said first conduction path and, alternately, through said second conduction path; a load coupled to said secondary side of said transformer; and a feedback control loop circuit receiving a feedback signal indicative of power being supplied to said load, and adapted to generate a second signal pulse signal for controlling the conduction state of said second plurality of switches only if said feedback signal is above a predetermined threshold; and drive circuitry receiving said pulse signal and controlling a conduction state of said first and second plurality of switches based on said first and second pulse signals, wherein, said drive circuitry alternating the conduction state of said first and second plurality of switches, controlling the overlap time of the switches in the first plurality of switches, and controlling the overlap time of the switches in the second plurality of switches, to couple said voltage source to said primary side.  
 615 patent, col. 10, 1.55-col. 11, 1.13.

FN2. Claim 18 states in full:

A converter circuit for delivering power to a CCFL load, comprising: a voltage source; a transformer having a primary side and a secondary side;  
 a first pair of switches and a second pair of switches defining a first and second conduction path, respectively, between said voltage source and said primary side;  
 a CCFL load circuit coupled to said secondary side;  
 a pulse generator generating a first pulse signal;  
 a feedback circuit coupled to said load receiving a feedback signal indicative of power being supplied to said load, and adapted to generate a second signal pulse signal for controlling the conduction state of said second plurality of switches *only if said feedback signal is above a predetermined threshold*; and drive



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circuitry receiving said pulse signal and controlling a conduction state of said first and second plurality of switches based on said first and second pulse signals; and drive circuitry receiving said pulse signal and said feedback signal and coupling said first pair of switches or said second pair of switches to said voltage source and said primary side based on said first and second pulse signals and said feedback signal to deliver power to said load.

615 patent, col. 12, 1.45-col.13, 1.4 (emphasis added).

FN3. On March 29, 2002, the court had consolidated the case for discovery, and possibly trial, with an earlier case filed by 02 Micro seeking a declaratory judgment of non-infringement and invalidity of MPS's U.S. Patent No. 6,111,814 ("814 patent"). The 814 patent is not in issue in this appeal.

FN4. Rule 3-1 of the Local Rules of Practice for Patent Cases before the United States District Court for the Northern District of California governs infringement contentions and states:

3-1. Disclosure of Asserted Claims and Preliminary Infringement Contentions.

Not later than 10 days after the Initial Case Management Conference, a party claiming patent infringement must serve on all parties a "Disclosure of Asserted Claims and Preliminary Infringement Contentions."

Separately for each opposing party, the "Disclosure of Asserted Claims and Preliminary Infringement Contentions" shall contain the following information:

- (a) Each claim of each patent in suit that is allegedly infringed by each opposing party;
- (b) Separately for each asserted claim, each accused apparatus, product, device, process, method, act, or other instrumentality ("Accused Instrumentality") of each opposing party of which the party is aware. This identification shall be as specific as possible. Each product, device, and apparatus must be identified by name

or model number, if known. Each method or process must be identified by name, if known, or by any product, device, or apparatus which, when used, allegedly results in the practice of the claimed method or process;

(c) A chart identifying specifically where each element of each asserted claim is found within each Accused Instrumentality, including for each element that such party contends is governed by 35 U.S.C. § 112(6), the identity of the structure(s), act(s), or material(s) in the Accused Instrumentality that performs the claimed function;

(d) Whether each element of each asserted claim is claimed to be literally present or present under the doctrine of equivalents in the Accused Instrumentality;

(e) For any patent that claims priority to an earlier application, the priority date to which each asserted claim allegedly is entitled; and

(f) If a party claiming patent infringement wishes to preserve the right to rely, for any purpose, on the assertion that its own apparatus, product, device, process, method, act, or other instrumentality practices the claimed invention, the party must identify, separately for each asserted claim, each such apparatus, product, device, process, method, act, or other instrumentality that incorporates or reflects that particular claim.

Rule 3-3 governs invalidity contentions and states:

3-3. Preliminary Invalidity Contentions.

Not later than 45 days after service upon it of the "Disclosure of Asserted Claims and Preliminary Infringement Contentions," each party opposing a claim of patent infringement, shall serve on all parties its "Preliminary Invalidity Contentions" which must contain the following information:

- (a) The identity of each item of prior art that allegedly anticipates each asserted claim or renders it obvious. Each prior art patent shall be identified by its number, country of origin, and date of issue. Each

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prior art publication must be identified by its title, date of publication, and where feasible, author and publisher. Prior art under 35 U.S.C. § 102(b) shall be identified by specifying the item offered for sale or publicly used or known, the date the offer or use took place or the information became known, and the identity of the person or entity which made the use or which made and received the offer, or the person or entity which made the information known or to whom it was made known. Prior art under 35 U.S.C. § 102(f) shall be identified by providing the name of the person(s) from whom and the circumstances under which the invention or any part of it was derived. Prior art under 35 U.S.C. § 102(g) shall be identified by providing the identities of the person(s) or entities involved in and the circumstances surrounding the making of the invention before the patent applicant(s);

(b) Whether each item of prior art anticipates each asserted claim or renders it obvious. If a combination of items of prior art makes a claim obvious, each such combination, and the motivation to combine such items, must be identified;

(c) A chart identifying where specifically in each alleged item of prior art each element of each asserted claim is found, including for each element that such party contends is governed by 35 U.S.C. § 112(6), the identity of the structure(s), act(s), or material(s) in each item of prior art that performs the claimed function; and

(d) Any grounds of invalidity based on indefiniteness under 35 U.S.C. § 112(2) or enablement or written description under 35 U.S.C. § 112(1) of any of the asserted claims.

FN5. Patent Local Rule 3-6(a) states:

3-6. Final Contentions.

Each party's "Preliminary Infringement Contentions" and "Preliminary Invalidity Contentions" shall be deemed to be that party's final contentions, except as set forth below.

(a) If a party claiming patent infringement believes in good faith that (1) the Court's Claim Construction Ruling or (2) the documents produced pursuant to Patent L.R. 3-4 so requires, not later than 30 days after service by the Court of its Claim Construction Ruling, that party may serve "Final Infringement Contentions" without leave of court that amend its "Preliminary Infringement Contentions" with respect to the information required by Patent L.R. 3-1(c) and (d).

FN6. The second-to-last sentence of 02 Micro's April 7 letter said "[02 Micro] is willing to agree on an exchange of amended invalidity contentions on the same schedule." 02 Micro apparently meant "infringement contentions" when it referred to invalidity contentions.

FN7. Rule 3-7 states:

3-7. Amendment to Contentions.

Amendment or modification of the Preliminary or Final Infringement Contentions or the Preliminary or Final Invalidity Contentions, other than as expressly permitted in Patent L.R. 3-6, may be made only by order of the Court, which shall be entered only upon a showing of good cause.

FN8. See *Integrated Circuit Sys. v. Realtek Semiconductor Co.*, 308 F.Supp.2d 1106, 1107 (N.D.Cal.2004) ("The purpose of the Patent Local Rules is to place the parties on an orderly pretrial track which will produce a ruling on claim construction approximately a year after the complaint is filed.").

FN9. Compare, e.g., *Informatica Corp. v. Bus. Objects Data Integration, Inc.*, No. C 02-3378 JSW, 2006 WL 463549, at \*2 (N.D.Cal. Feb.23, 2006) (granting motion to strike new infringement claims because the standard for amendment of contentions was not satisfied); with, e.g., *Biogenex Labs. v. Ventana Med. Sys.*, No. C 05-860

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JF (PVT), 2006 WL 2228940, at \*4 (N.D.Cal. Aug. 3, 2006) (considering new theory despite non-compliance with patent local rules because "the Court is extremely reluctant to dispose of substantive infringement claims based upon procedural defects").

FN10. See, e.g., *Slip Track Sys., Inc. v. Metal-Lite, Inc.*, 304 F.3d 1256, 1270 (Fed.Cir.2002) (applying Ninth Circuit law to determine whether good cause had been shown for modifying the pre-trial scheduling order under Fed.R.Civ.P. 16(b)); *Bose Corp. v. JBL, Inc.*, 274 F.3d 1354, 1360 (Fed.Cir.2001) (applying First Circuit law to the exclusion of evidence of a prior art reference under Federal Rule of Evidence 403 because the evidence lacked probative value and the other party would be prejudiced).

FN11. The local patent rules in this case explicitly yield to the Federal Rules of Civil Procedure in the event of a direct conflict. See U.S. Dist. Ct. N.D. Cal. Patent L.R.2-5.

FN12. See *Nova Measuring Instruments Ltd. v. Nanometrics, Inc.*, 417 F.Supp.2d 1121, 1123 (N.D.Cal.2006) ("The [patent local] rules are designed to require parties to crystallize their theories of the case early in the litigation and to adhere to those theories once they have been disclosed.").

FN13. On appeal, O2 Micro contends that Dr. Lin was a general, not expert, witness. However, the district court characterized Dr. Lin's testimony as "supplemental expert testimony," *O2 Micro Int'l Ltd. v. Monolithic Power Sys., Inc.*, Nos. C 00-4071 CW, C 01-3995 CW, slip. op. at 9 (N.D.Cal. Feb. 11, 2004), and we see no error in this characterization.

FN14. In this respect, the district court appeared to be mistaken when it concluded

that the Isense and Vsense theories were different because one made the "only if" comparison in units of current and the other in units of voltage. The appellee admits that both theories do depend on a voltage reading.

FN15. See, e.g., *Ty, Inc. v. Softbelly's, Inc.*, 353 F.3d 528 (7th Cir.2003) (holding that discriminatory sanctions imposed on one party for a minor violation were an abuse of discretion); *Potlatch Corp. v. United States*, 679 F.2d 153 (9th Cir.1982) (holding that it was an abuse of discretion to exclude evidence where the moving party had acted diligently).

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Briefs and Other Related Documents (Back to top)

- 2006 WL 1433942 (Appellate Brief) Reply Brief of Counterclaim Defendants-Appellants O2 Micro International Limited and O2 Micro, Inc. (Apr. 24, 2006) Original Image of this Document (PDF)
- 2006 WL 1177390 (Appellate Brief) Response Brief of Defendant/Counterclaimant-Appellee Monolithic Power Systems, Inc. (Apr. 7, 2006) Original Image of this Document with Appendix (PDF)
- 2006 WL 815379 (Appellate Brief) Brief of Counterclaim Defendants-Appellants O2 Micro International Limited and O2 Micro, Inc. (Feb. 28, 2006) Original Image of this Document with Appendix (PDF)
- 06-1064 (Docket) (Nov. 8, 2005)

END OF DOCUMENT